## Cross-Cultural Psychology

## Cross-Cultural Psychology

## Contemporary Themes and Perspectives

SECOND EDITION

Edited by

Kenneth D. Keith

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For
Connie Keith,
my traveling companion and moral compass for more than a half century
and
Walt Lonner,
mentor, friend, and pioneer

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#### Foreword

Sometimes a little thing, like laughing about the same matter, makes us realize that despite apparent cultural differences, there is something we have in common that unites us in this very moment. It is important to be reminded of these two sides of the cultural coin, in an era in which societies become increasingly diverse and we become more interconnected around the globe—in a time in which recent socio-political developments suggest that cultural differences divide us. This is when identifying a common ground becomes more important than ever in the pursuit of rapprochement.

So, how different are we really? And what exactly do we have in common? Cross-cultural psychology aims to respond to these questions. Even though it is a relatively new branch of psychology, it has already demonstrated the important insights that can be gained from a more contextualized understanding of the human mind and behavior. There is still a long way to go for psychology to become truly culturally inclusive and it is crucial to be aware of the Western bias in our research. This is why the question that I welcome most from my students is when they ask *What about other cultures*?

The second edition of *Cross-Cultural Psychology: Contemporary Themes and Perspectives* addresses this very question by offering a collection of readings across a wide array of contemporary psychological subjects, such as development, gender and sexual orientation, cognition and emotion, personality, and social psychology. It also includes chapters on basic concepts in cross-cultural psychology, the question of how to conduct research across cultures, and such areas of applied cross-cultural psychology as cultural health beliefs and practices or intercultural communication. The second edition mirrors the dynamic developments in the field with many new chapters, such as *Evolutionary Psychology* and *Education Across Cultures*. There is even an entire new section titled "Consciousness," including a chapter on culture and dreams—a topic hard to find in any other reference book on cross-cultural psychology. The book conveys how culture plays a role in every aspect of our lives. It does so by finding the right balance between informing about

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cultural differences and pointing to similarities. For example, the chapter "Language and Culture" discusses universal aspects of language as well as cultural differences and to what extent these reflect the way we think about the world. All chapters are written by scholars with renowned expertise in the respective areas, which will doubtless attract many readers.

Given the comprehensive collection of topics, this book will be interesting for any student who is curious to know more about culture. It will be of great value for teachers as well. I have assigned chapters from the first edition as readings in my general psychology classes to provide a cross-cultural perspective on a specific subject matter. The book has also played an important role in my teaching on cross-cultural psychology, complementing other readings and textbooks. Researchers can consult specific chapters to obtain an overview of the main theories or state-of-the-art on a topic they would like to start investigating. Practitioners and professionals who interact with cultural minorities will also find it very informative and insightful. Given that the book is written in a very accessible way, anyone from the general public interested in cross-cultural psychology will also benefit from reading it.

Culture is omnipresent; and cultural competence is a crucial ingredient to accomplish socially inclusive, peaceful, and productive societies in our interconnected world. It is in this context that it becomes paramount to develop an understanding of different cultures, which is why a cross-cultural perspective should be an integral part of the teaching of psychology. The editor, Ken Keith, is a true advocate of this position. He has contributed to the literature with numerous seminal works on teaching and culture and cross-cultural psychology, as evidenced by the books, Culture Across the Curriculum and the Encyclopedia of Cross-cultural Psychology. I share his vision and, as a psychology teacher and the coordinator of an international master program in Social & Cultural Psychology, I aim to train our students to see the two sides of the cultural coin. I want them to develop intercultural awareness, knowledge, and skills as well as an inclusive posture toward social and cultural differences. I hope that these students one day will become the socially responsible citizens, social entrepreneurs, and scientists of tomorrow who address contemporary social and societal challenges in an innovative, reflective, culturally sensitive, and therefore sustainable way. This book is an indispensable companion on this journey and I expect that it will find a home in many academic libraries around the world.

> Christin-Melanie Vauclair Lisbon, Portugal

## Preface

Interest in the relation between psychology and culture has blossomed over the past half-century. It has been an era marked by new scientific journals, many books exploring various aspects of the psychology-culture connection, and many university courses that deal with the role of culture in our understanding of psychology. Despite this increased focus on culture, much of the research literature in psychology continues to be dominated by North American and European scientists and journals.

The dominance of Western thought has prompted the development of psychological approaches unique to their particular cultural backdrop in various parts of the world, and it causes us to wonder to what extent our understanding reflects a psychology of all people. Can our knowledge be generalized to people of other backgrounds—cultural, national, ethnic, or racial? Do people in different contexts experience basic psychological processes (e.g., development, disorders, emotion, gender and sex roles, learning, social interaction, well-being) in the same ways? Are there psychological principles or truths that are universal, that transcend culture? And are some principles and processes tied closely only to the cultures in which they arise? These are important questions, and the aim of this book is to provide some guidance as you ask them.

The authors whose work appears in this book are not only researchers, but also accomplished teachers. They share the conviction that investment in the students of today is crucial to the future of the world's cultures. Today's students are tomorrow's leaders, and the world will need strong leaders as we face such global challenges as poverty, illness, climate change, economic disparity, and world conflict. These problems demand broad understanding of human behavior, and psychological scientists have the knowledge and skills to contribute to solutions.

You may well be reading this book in a course in cultural or cross-cultural psychology. We might hope that one day culture will not be a separate offering in the psychology curriculum, but that culture will become an integral, natural part

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of the mainstream across the curriculum. We can think of culture and psychology not just as another area of content, but as an approach, a mindset that should pervade our study of human behavior.

The authors represented in this book write from a variety of perspectives and specialties—but all are committed to a comprehensive understanding of behavior that includes the important role of culture. I hope, as you study their work, that you will be thoughtful and deliberate as you construct your own perspective, that you will find a way to contribute to a psychology of all people, and that you are successful not only in your career, but as a responsible citizen of planet Earth.

Kenneth D. Keith Omaha, NE

## Acknowledgments

No work of this scope is accomplished by one person. I am grateful to the many contributors to this volume, not only for their work on these chapters, but also for their collegiality and their broader commitment to a psychology of all people. Our discipline is better for their efforts.

Darren Reed encouraged development of this new edition, and Darren Lalonde at Wiley-Blackwell supported it along the way. I owe them both my thanks. And, finally, I recognize that the project would never have succeeded without the editorial and production work of Susan Dunsmore, Elisha Benjamin, and Monica Rogers. Their diligence and skill kept me on task and on schedule, and made the book better than it could otherwise have been. They all have my gratitude.

# Part I Basic Concepts

The study of psychology and culture necessarily begins with some fundamental questions: What is culture? Why is culture important to an understanding of psychological science? How have researchers chosen to investigate the relation between psychology and culture? Thus, Part I deals with the construct of *culture*—what it is and some of the key characteristics that define it. As we will see, crosscultural interest in psychological phenomena is by no means new, but the nature of that interest has evolved in fascinating ways, from the ancient Greeks to the early twentieth century, and now to the twenty-first century.

As psychologists around the world have undertaken the systematic study of culture, the field of cross-cultural psychology has emerged, but not without some disagreements about how psychological scientists should understand and use cultural constructs. Among the perspectives arising from these differing viewpoints are cultural psychology, indigenous psychology, and cross-cultural psychology. Psychologists with a focus on culture are interested in how culture influences behavior, and in how researchers integrate key cultural variables into their work. These variables include a number of critical dimensions of culture. Best known among these is the individualism–collectivism (IC) dimension, but as we will see, other dimensions may well be more important than past research has suggested.

Individuals of course become enculturated in the environments into which they are born and in which they develop. This process results, perhaps inevitably, in a predictable tendency to view other cultures from the perspective of our own. Such ethnocentric tendencies often result in psychological barriers between cultures; we are likely to view cultures different from our own as less desirable and perhaps even threatening. Researchers have undertaken a number of approaches, not only to understanding ethnocentrism, but also to attempt to reduce it; we will review

some of these efforts in this section of the book. Psychologists have also examined ways to improve intercultural understanding via the social and communication skills and knowledge that constitute cultural competence.

Early work in cross-cultural psychology emphasized identifying and measuring differences between cultures. This was perhaps understandable in the early days of the science. In fact, we could make the argument that every science began with description before moving to efforts to explain its subject matter. It seems clear now that the time for obsession with difference is behind us. The study of psychology and culture is moving toward not only a more sophisticated understanding of our differences, but also recognition that, despite cultural differences, human beings across cultures share many more commonalities than differences. Furthermore, researchers are increasingly sensitive to the value of a broad understanding of the relation between culture and behavior, and the importance of the particular psychological perspectives arising from unique cultural contexts. Part I will prepare us for the many approaches that follow as the authors of the remaining chapters explore the methods and findings of a myriad of psychologists who have examined the relation between psychology and culture.

## Psychology and Culture An Introduction

#### Kenneth D. Keith

In this book we attempt to provide the reader with a wide-ranging introduction to the relation between culture and a number of core subjects in the field of psychology. This aim requires that we begin by defining culture and the intersection between culture and psychology—the discipline we know today as cross-cultural psychology. Although all psychological research takes place in a cultural context, psychological scientists have not always taken account of the influence of culture on psychological processes, or the generalizability of those processes across cultures. This chapter provides a brief overview of these ideas as an introduction to the varied topics that follow in the remainder of the book.

#### Culture

Many writers, including anthropologists, sociologists, and psychologists, have written about culture, providing a variety of definitions and descriptions. Heine (2012) described a two-part definition of culture: (a) information (e.g., beliefs, habits, ideas), learned from others, that is, capable of influencing behavior; and (b) a group of people who share context and experience. Matsumoto and Juang (2013) offered a comprehensive definition, calling culture

a unique meaning and information system, shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, by coordinating social behavior to achieve a viable existence, to transmit successful social behaviors, to pursue happiness and well-being, and to derive meaning from life. (p. 5)

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Matsumoto and Juang's (2013) definition shares key characteristics with that of Triandis, Kurowski, Tecktiel, and Chan (1993), who defined culture in terms of objective and subjective characteristics that increase the odds of survival, provide satisfaction for people sharing an environmental context, and are shared via language. Objective elements of culture, as identified by Triandis et al., are the tangible objects of culture (architecture, food, manufactured products), whereas subjective culture comprises such human elements as social, economic, political, and religious practices. It is of course the subjective human elements that are of most interest to psychological scientists. Cohen (2009) advocated extension of the notion of culture to a variety of constellations of human groups, including religion, socioeconomic status, and region (within a country). Finally, Berry, Poortinga, Segall, and Dasen (2002) perhaps put it most succinctly, when they called culture simply "the shared way of life of a group of people" (p. 2). Common features of virtually all definitions of culture include the notion of a group with shared behaviors, values, and beliefs that are passed from generation to generation. Cultures may vary in their complexity (Triandis, 1980), and some embody significant diversity (i.e., are multicultural), with many subcultures (Miller, 2008), while other cultures are much more homogeneous or "tight" (Triandis, 1977). And Cheung (2012) suggested that a culture might be any group (not just national or ethnic) whose members share beliefs, values, norms, and heritage.

It is also important to note what culture is not. Perhaps most importantly, culture is not synonymous with nationality or race. We need look only at such diverse nations as the United States or the United Kingdom to see that a nation may include many cultural and subcultural groups—thus making virtually pointless a discussion of, for example, "the" American culture. And genetic research has suggested that the biological differences among races are relatively superficial, leading to the conclusion that race is largely psychosocially constructed (Mio, Barker-Hackett, & Tumambing, 2006; Smedley & Smedley, 2005) and, in the words of Segall, Dasen, Berry, and Poortinga (1999) an "illusion" (p. 20). This does not mean, of course, that biology has no role to play. Behavior is a product of the complex interplay among heredity, environment, and individual skills and knowledge; and the field of evolutionary psychology has sought to explain how evolution has led to development of the human brain and the capacity to learn, giving rise to the knowledge and values that constitute culture (Pinker, 1994, 2018). Culture evolved because it contributed to human survival and reproduction (Baumeister, 2005).

Finally, culture can be construed as a characteristic residing *within* the person, and thus related to all the psychological processes associated with the person; or culture can be viewed as *outside* the person, making it more like a research variable or manipulation (e.g., Morling, 2016; Triandis, 2000). In the following sections we will discuss the implications of these perspectives for research in the field.

#### Why Cross-Cultural Psychology?

Arnett (2008) asserted that the conclusions of research conducted by American psychologists "are based not on a broad cross-section of humanity but on a small corner of the human population—mainly, persons living in the United States" (p. 602). In his analysis of six prestigious journals of the American Psychological Association, Arnett found that the large majority of authors were from American universities, and that a similar majority of the research participants were Americans—most of them European Americans. Further, in those cases in which the authors reported by Arnett were not affiliated with American institutions, they were predominantly from Western and English-speaking universities—making them a subset of the populations that Henrich, Heine, and Norenzayan (2010) called WEIRD (Western, educated, industrialized, rich, democratic). In a follow-up to Arnett's study, Webster, Nichols, and Schember (2009) analyzed a different (but overlapping) group of journals; although they reported an encouraging trend over a 30-year period, they too found a majority of American researchers in the journals they studied. Similarly, Quinones-Vidal, Lopez-Garcia, Penaranda-Ortega, and Tortosa-Gil (2004) found more than 90% of the studies appearing in the Journal of Personality and Social Psychology were North American. More recently, in a study of the research participants represented in four leading teaching of psychology journals, Richmond, Broussard, Sterns, Sanders, and Shardy (2015) reported that Caucasians were significantly overrepresented, and other ethnic groups significantly underrepresented. It is not difficult to fathom why Guthrie (1998) titled his book about the role of African American psychologists, Even the Rat was White.

Arnett (2008) attributed the lack of cross-cultural research in American psychology at least in part to a philosophy of science dedicated to identifying universal principles. This approach, Sue (1999) contended, has included a focus on internal validity (demonstration of causal connections) at the expense of external validity (generalizability). However, LoSchiavo and Shatz (2009) saw the problem in a different light, acknowledging the lack of cultural diversity in psychological research, but arguing that many American psychologists simply do not have convenient, affordable access to international samples. Nevertheless, North American psychology has been limited in its scope, and American psychologists have tended to treat their findings as if they were universal truths, even when researchers did not test findings in diverse cultures. Psychologists interested in culture, however, have sought to move from assumptions about universal principles to empirical testing across cultures (Heine & Norenzayan, 2006). Whatever the reasons, these concerns about the need to understand the role of culture in psychology are significant, and they extend to the challenges of teaching in psychology as well (e.g., Bronstein & Quina, 1988; Goldstein, 1995; Hill, 2002; Keith, 2018).

## Teaching about Culture: How Have Our Textbooks Changed?

My first experience as a teacher came more than five decades ago when, as a beginning graduate student, I taught introductory psychology. I can still remember the excitement I felt when the department chair offered me the job, and the passion with which I undertook to prepare and present the class. I chose one of the mainstream textbooks of that time (Morgan & King, 1966) and went to work. When I compare that textbook to those of today, there are many superficial differences. The book was printed on a kind of off-white paper, and all but three of more than 800 pages were printed in black, white, or shades of gray; the only exceptions were illustrations of the color spectrum, the function of cones, and negative afterimages. Strangely, a color wheel illustrating the complementarity of colors actually appeared in black, white, and gray, with pure red portrayed as black!

Today's introductory psychology textbooks are, of course, filled with four-color illustrations, color photographs, and a variety of colorful computer-generated images. But these are only differences of style. The important question we should ask is this: To what extent has the content of the psychology we teach changed over the years? And, more specifically, are we teaching a more inclusive psychology than that of a few decades ago, or a century or more ago? In the context of these questions, we will review some developments in the field as we have attempted to encompass the role of culture in our understanding of psychological concepts and phenomena.

My 1960s textbook (Morgan & King, 1966) had a very brief (three-paragraph) section on cultural influences on personality, and little more than a page on intelligence differences associated with culture—in this case rural vs. urban and "Negroes" vs. Whites. Today, of course, we know that race cannot be equated with culture, and to their credit, Morgan and King concluded that "We are not required to make decisions about groups; instead, the problem is to make decisions about individuals" (p. 441). Nevertheless, in the realm of personality and intelligence, culture received little attention. Elsewhere, in a chapter on social influences, Morgan and King devoted about four pages to a discussion of culture; they defined culture, similarly to today's researchers, in terms of groups sharing behaviors, attitudes, and values. Anthropology rose to the fore in their treatment of culture, with the observation that most such work had been done with cultures deemed "primitive" or "backward" (p. 567). Except for brief references to American culture, the focus was on work in cultural anthropology, including that of Margaret Mead (1935).

Despite mention of cultural differences and the potential for international conflict and communication failure as a result of differential cultural experience, Morgan and King cited few examples in accounting for such differences. The emphasis was on differences involving Native Americans, Samoans, and "primitive" cultures of New Guinea. Within the U.S., Morgan and King noted a couple of

rather isolated religious sects but did not discuss the notion of cultural diversity. Although not using the word "ethnocentrism" (see Chapter 2 in this volume), Morgan and King did acknowledge the tendency for people to take for granted the stereotypes and attitudes that characterize their own culture. Nevertheless, the book's index contained only seven entries for "culture" or "cultural," all referring to the personality, intelligence, or social sections of the book. The Morgan and King treatment of culture was typical for the era, and perhaps more comprehensive than some other textbooks of the time. It was certainly more comprehensive than earlier general psychology books. Ladd (1894), for example, made no reference to the concept of culture, and William James (1892/1961) did not mention culture in his widely used *Psychology: The briefer course*.

We might logically ask whether introductory or general psychology books of the twenty-first century are more likely to acknowledge the role of culture than these earlier authors. Happily, the answer is yes. For example, typical introductory books of today (e.g., Bernstein, Penner, Clarke-Stewart, & Roy, 2008; Myers & DeWall, 2015; Weiten, 2017) may include 30-50 index entries dealing with culture, and the books integrate the concept of culture in such mainstream sections as abnormality, achievement motivation, alcohol, altered states, attachment, attitudes, attractiveness, attribution, cognitive development, communication, gender roles, parenting, perception, personality, prejudice, self-esteem, sleep, temperament, testing, and more. Today's introductory texts sometimes provide brief definitions of such concepts as cultural psychology (e.g., Gray & Bjorklund, 2014). Clearly, coverage of culture in the teaching of psychology has come a long way, not only since the 1960s, but also since the 1980s, when Cole (1984) acknowledged the presence of international psychology in the American curriculum, but nevertheless lamented that "cross-cultural work is ghettoized" (p. 1000), leaving students with little knowledge of the psychological characteristics of other cultures. Lonner and Murdock (2012), in a study of 40 introductory textbooks over a 20-year period, found a significant increase in the coverage of culture.

Today, many student readers may know that people around the world recognize basic emotional expressions, and that cultural display rules regulate these expressions; that there is a complex interplay among genetics, culture, and intelligence; that North American methods of IQ assessment are culturally limited; or that cultural experience with two-dimensional depictions of three-dimensional objects influences recognition and interpretation of photographs or drawings. Students may also know that one person's schizophrenia may be another's vision, or that cultural sensitivity is essential to successful therapy. We are beginning to see recognition of the integral role that culture plays in the ways that psychological principles play out across cultures, and the importance of broadening the cultural scope of our teaching (Gross, Abrams, & Enns, 2016; Keith, 2018; Rich, Gielen, & Takooshian, 2017). But, as always in the evolution of our knowledge and our science, there is plenty of room for improvement, and the field remains haunted by the findings and views of such writers as Arnett (2008) and Sue (1999) about its cultural limitations.

#### Cross-Cultural Psychology: What It Is and Where It Has Come From

The field of cross-cultural psychology finds itself today in somewhat the same position as the discipline of psychology soon after the turn of the twentieth century, when Hermann Ebbinghaus (1908/1973) observed that "psychology has a long past, yet its real history is short" (p. 3). Just as there was widespread interest in the subjects we now call psychology long before the field was given a name, so it was that many writers were interested in culture and cultural relationships long before the modern concern with the connection between culture and psychology.

Some reports are ancient; thus, as early as five centuries BCE, Hecataeus of Miletus proposed the division of the world into Asia and Europe and observed that "the traditions of the Greeks seem to me many and ridiculous" (Durant, 1939, p. 140). Herodotus, at about the same time, looked down upon those who did not speak Greek or live in Greek city-states (Klineberg, 1980). Other reports, often taken as the beginning point for cross-cultural psychology, date from the early twentieth century. W. H. R. Rivers (1905), for example, conducted research comparing visual perception across cultures, and W. G. Sumner (1906), in his study of various cultures, coined the term ethnocentrism to denote the tendency of people to elevate their own cultures and to denigrate the cultures of others. At about the same time, Wilhelm Wundt (1916) was engaged in developing his multi-volume folk or cultural psychology (Völkerpsychologie). Subsequently, although a variety of anecdotal reports appeared, several decades passed before an explosion of cross-cultural work appeared early in the second half of the twentieth century (Lonner, 1974, 2013). And crosscultural psychologists have had major influence in recent decades (Matsumoto & Juang, 2013) as cross-cultural research has proliferated. For example, a recent PsychINFO<sup>©</sup> search using "cross-cultural psychology" as the subject returned 6,363 titles published from 1915 to 2018; a similar search for "cultural psychology" produced 11,495 titles. These numbers represent increases of 250-500% over those produced by similar searches for the earlier edition of this book in 2011. The development of the field has not, however, always progressed smoothly and without the emergence of divergent points of view. Chief among these have been the perspectives known as cross-cultural psychology, cultural psychology, and indigenous psychology.

#### Cross-Cultural Psychology

Kağitçibaşi and Berry (1989) defined cross-cultural psychology as the "study of similarities and differences in individual psychological and social functioning in various cultures and ethnic groups" (p. 494). Cross-cultural psychologists originally set out to seek universal principles that would apply across cultures (Sinha, 2002). Thus, cross-cultural psychology traditionally involved testing Western

theories in other cultures (Laungani, 2002; Yang, 2000), with the notion that culture was independent of the individual and separable from psychological activities and principles (Greenfield, 2000). Cross-cultural psychologists often collect data across multiple cultures, comparing and contrasting effects in an attempt to produce knowledge about phenomena that are universal and those that are culture-specific (Triandis, 2000), and attempting to determine how different cultures influence behavior (Brislin, 2000).

Cross-cultural psychologists have conducted much of their research using the research designs and methods of mainstream Western psychology. Although this may allow for the possibility of identification of psychological universals, the cross-cultural approach has received criticism on several fronts. For example, the use of culture as an independent variable, and the associated failure to identify specific aspects of culture that may influence dependent measures, has long been a problem (Lonner, 1974), resulting in flawed conclusions about the causal role of cultural attributes (Ratner & Hui, 2003). In fact, some writers have argued that cross-cultural psychology, rather than being a subfield of psychology, should actually be seen as a special method of inquiry (Lonner, 2018).

Further, studies have sometimes employed research materials (e.g., tests, apparatus, stimulus arrays) that are unfamiliar or ecologically invalid for people in some cultures (Ratner & Hui, 2003), with the result that conclusions or comparisons may be meaningless. For instance, if we make assumptions about the individualistic or collectivistic (IC) nature of cultures, and then attribute other observed differences between the cultures to our assumptions about the IC dimension, we may go wrong in at least two possible ways: First, the assumptions of individualism and collectivism (if not measured in individual research participants) may be erroneous; and, second, reliance on differences in this single cultural dimension as an explanation for differences in outcome measures may mask other, more precise explanatory possibilities. Malpass (1977) summarized the fundamental problem of cultural comparisons in this way:

No matter what attribute of culture the investigator prefers to focus upon or to interpret as the causative variable, any other variable correlated with the alleged causative variable could potentially serve in an alternative explanation of a mean difference between two or more local populations. (p. 1071)

Clearly, exploring underlying psychological mechanisms in cross-cultural research will be essential to understanding the role of multiple variables (Matsumoto & Yoo, 2006).

Despite the methodological concerns associated with cross-cultural research, cross-cultural psychological scientists have learned a great deal about psychological phenomena around the world, including many aspects of behavior that are universal (or not). One of the most significant considerations for researchers conducting cross-cultural studies is recognition of the importance of knowledge of the relevant cultures (Heine, 2012; Niblo & Jackson, 2004).

#### Cultural Psychology

Researchers identified as cultural psychologists are less likely than cross-cultural psychologists to be interested in traditional experimental or quasi-experimental approaches, and more likely to see culture as internal to the person (Triandis, 2000). Cultural psychology uses methods and studies problems arising from the everyday activities of particular cultures, with less emphasis on cross-cultural comparison (Greenfield, 2000), recognizing that psychological functions (cognition, emotion, behavior) are regulated by socially constructed meanings (Valsiner, 2013). Therefore, the methods of cultural psychologists are often ethnographic in nature—meaning they involve extensive observation and rich description of a culture (Heine, 2012). The focus is on finding relations between a culture and the psychological characteristics of people living in the culture, with the corresponding view that psychological processes derive from the interplay between the person and his or her culture (Shiraev & Levy, 2010).

Cultural psychologists tend to study cultures quite different from their own, are interested in natural (non-contrived) settings and situations, and focus on context (i.e., they are less likely to be interested in psychological principles independent of the context in which they arise) (Triandis, 2000). According to Ratner (2006), in a discussion of cultural psychology, aspects of culture provide the foundations and predictors of psychological processes more effectively than do personal factors. Thus, some writers (e.g., Yang, 2000) have characterized cultural psychology as a hybrid of psychology and anthropology that prefers to define psychology in terms of context-bound concepts. Cultural psychology sees culture as essential to understanding all psychological processes, and is interested in principles derived from culture, rather than imposed upon it (Segall, Lonner, & Berry, 1998).

#### Indigenous Psychologies

Arising as a reaction to so-called mainstream psychology, indigenous psychology represents the efforts of researchers in many (mainly non-Western) cultures to develop a "science that more closely reflects their own social and cultural premises" (Allwood & Berry, 2006, p. 244). Indigenous psychologies are ways of thinking psychologically that grow out of individual cultures, developing scientific perspectives consistent with the cultural realities of the particular settings (Berry et al., 2002). One consequence of the development of indigenous psychologies has been a movement from investigation of psychological universals to study of culture as a psychological system (Sinha, 2002), with a bottom-up approach that builds theoretical views based on local phenomena (Hwang, 2013).

The focus of indigenous psychologies, unlike the comparative focus of crosscultural psychology and the anthropological tendencies of cultural psychology, revolves around psychological understandings built upon their own unique cultural resources (Allwood & Berry, 2006). As a result, numerous indigenous psychologies have evolved in individual countries (Allwood, 2018). Further, indigenous psychologists are interested in studying the particular problems and challenges (e.g., economy, poverty, religion) of their particular cultures. This emphasis on the primary role of culture leads to a specificity that results in a focus on cultural differences and unique aspects of societies, rather than cross-cultural similarities or universal principles (Poortinga, 2005). However, the question remains whether indigenous psychologies will contribute to a broader understanding of global psychology.

#### Is There a Common Ground?

Although the perspective known as cross-cultural psychology has received criticism for placing more emphasis on scientific methodology than on understanding of culture (Laungani, 2002), cross-cultural psychologists have, in recent years, become more sensitive to the need to examine both universal and culture-specific phenomena (e.g., Triandis, 1999). And all of the approaches noted above—cross-cultural, cultural, and indigenous psychologies—have made significant contributions to the so-called cultural revolution in psychology (Ng & Liu, 2000; Yang, 2000).

Despite the limitations various writers have noted in so-called mainstream scientific psychology, it seems unlikely that cultural approaches will unseat the powerful scientific findings of traditional psychology (Ng & Liu, 2000). However, it is also true that the past several decades have seen a dramatic increase in the development of psychological research and theory placing culture in a central position (Lonner, 2013; Segall et al., 1998). Researchers investigating the relation between culture and psychology have shown the role of culture as a significant influence in many traditional fields of psychological study (e.g., perception, cognition, social behavior, development, education), leading to the conclusion that "Nothing transpires in a cultural vacuum" (Lehman, Chiu, & Schaller, 2004, p. 704).

In an effort to articulate the importance of cross-cultural research, Kim (2007) proposed four perspectives that might be found among researchers:

- 1 the "pre-encounter research" culture: "I'm not interested"
- 2 the "initial encounter" research culture: "Culture is a nuisance"
- 3 the "Captain Cook" research culture: "Let's explore and compare"
- 4 the "paradigm shift" research culture: "Beyond ethnocentric paradigms" (p. 280).

Kim's point is that researchers must recognize their own worldviews and the influence of worldview on their work—and that reaching the highest level in his hierarchy requires intercultural sensitivity and a willingness to reconsider one's worldview. Such a true paradigm shift would seem to suggest the integration of traditional scientific psychology with a broadened understanding of and sensitivity to, the importance of cultural context.

In a somewhat similar, but more specific, vein, Matsumoto and Yoo (2006) posited the need for an ongoing evolution in cross-cultural research. The field has moved, they suggested, through cross-cultural comparisons, identification of meaningful cultural dimensions, and cultural studies exploring the role of psychological constructs and variables in differing cultural contexts. Now, Matsumoto and Yoo argued, the field must evolve to develop research empirically investigating specific psychological variables or characteristics and their role in producing cultural differences. This approach would move the field from the tendency to assume global-level cultural characteristics (often stereotypically) to measurement of specific influences at the level of individual research participants. One example would be the design of "unpackaging" studies—the identification and incorporation of context variables (e.g., opinions, norms, values, attitudes) to replace broader cultural notions in explanation of cultural phenomena and differences (Matsumoto & Yoo, 2006). Such approaches will also require continuing enhancement of understanding of the role of such measurement issues as a variety of kinds of bias in cross-cultural research (Vauclair, Boer, & Hanke, 2018).

It seems clear that in the future, cross-cultural studies will continue to move toward a better understanding of psychological processes involved in cultural differences and of the basis of psychological processes (e.g., behavior) in culture (Lehman et al., 2004). In the chapters that follow, we will review a wide variety of theory and research, representing cross-cultural, cultural, and indigenous approaches. Our effort will be not to make distinctions among these perspectives, but to achieve a broad current understanding of key aspects of the field, with the view that multiple approaches are useful in the effort to explain the "unsettled marriage" that characterizes the relation between academic psychology and culture as a shared human phenomenon (Lonner, Keith, & Matsumoto, 2019). We will thus use the term *cross-cultural psychology* inclusively, to denote the full range of interest in the relation between culture and psychology.

#### **Some Basic Principles**

A few organizing assumptions may help us to conceptualize the content of coming chapters as this volume's authors present a variety of perspectives and areas of research in psychology and culture. These include the following (Keith, 2008):

- 1 People view and evaluate other cultures from the perspective of their own.
- 2 Some psychological principles are universal, and some are culture-specific.
- 3 Several key cultural dimensions aid our understanding and study of crosscultural phenomena.
- 4 Despite the many cultural differences identified by cross-cultural researchers, people in various cultures share more commonalities than differences.

#### Seeing Other Cultures in Light of Our Own

It has been well over a century since Sumner (1906) gave a name to the phenomenon of *ethnocentrism*. Ethnocentrism is the tendency for humans to hold up their own group or culture as a standard, seeing it as superior to others (Berry et al., 2002; see Chapter 2, this volume). We may be suspicious of individuals from other groups (Price & Crapo, 2002), and ethnocentrism may lead to conflict with, and stereotyped views of, other groups (Triandis, 1994). Ethnocentrism is probably universal (LeVine & Campbell, 1972), and may be a natural result of the enculturation that children experience as they are socialized in the customs, practices, and ways of behaving that characterize their cultures.

Although ethnocentrism may well be inevitable, people can learn to become more flexible (Pettijohn & Naples, 2009). Nevertheless, ethnocentrism reflects a limited worldview that may develop without individual intention or awareness.

#### Etics and Emics

Cross-cultural researchers have long sought universal behavioral principles—psychological phenomena that are true or valid across cultures—while at the same time realizing that many psychological findings are significantly influenced or limited by their specific cultural context. Deriving from the writings of Pike (1967), the terms *etic* and *emic* have evolved from linguistic usage to describe these two eventualities. Thus, the term *phonetic* has given rise to *etic* (a universal), in recognition of the fact that phonetics exist in all languages; *phonemics*, on the other hand, are sounds that distinguish languages from one another, leading to the use of *emic* as a term to denote a culture-limited phenomenon (Triandis, 1994). For example, nearly every culture might recognize and value intelligence (an etic) but differ widely in the specific aspects of intelligence (e.g., type or speed of problem solving; Keith, 1996) that are considered important (an emic). Or aggression may be of interest in many cultures but may play out quite differently across different cultures.

Etic and emic can also characterize *approaches* to cultural research (Berry, 1969; Berry et al., 2002; Cheung, 2012). An emic approach involves the study of a particular culture, usually from within, from the perspective of the members of the culture (i.e., indigenous psychology). Alternatively, an etic approach is likely to investigate one or more characteristics of multiple cultures, often from the outside (i.e., traditional cross-cultural psychology) and imposing external measurement (Price-Williams, 1975). Put another way, the etic approach looks for cross-cultural commonalities, while the emic approach searches for meaningful concepts within a specific culture. Although psychologists are often in search of universals, a danger of the etic approach is that researchers, as products of their own cultural experience, may be tempted to impose their own biases and expectations on other

cultures and as a result lose the opportunity for meaningful comparison (Segall et al., 1999). Niblo and Jackson (2004) proposed a combined approach, suggesting that the understanding derived from emic research can lead to discovery and validation of universals via etic research.

#### Dimensions of Culture

As investigators have explored psychological similarities and differences occurring across cultures, they have identified a number of key dimensions that have proven useful in understanding cultural influences. The best known of these dimensions are those identified by Geert Hofstede (1980); Hofstede & Hofstede, 2004): (a) individualism–collectivism (IC); (b) power distance (PD); (c) uncertainty avoidance (UA); (d) masculinity-femininity (MA); and (e) long-term orientation (LTO).

These dimensions can be summarized in the following way: IC is the extent to which the individual feels free from group pressure, or to which the individual's goals are similar to or different from the group's; PD reflects the degree to which group members accept an unequal distribution of power, or the difference in power between more or less powerful members of the group; UA is the degree to which a group develops processes to reduce uncertainty and ambiguity, or to deal with risk and unfamiliarity in everyday life; MA is the extent to which gender roles and distinctions are traditional, and masculine (e.g., aggression) or feminine (e.g., cooperation) traits are viewed favorably; and LTO suggests the level of willingness of members of the culture to forego short-term rewards in the interest of long-term goals (Brislin, 2000; Gannon, 2001).

A second theory of cultural dimensions arose from the work of Shalom Schwartz (1999), who described a framework of seven cultural value types (affective autonomy, egalitarianism, embeddedness, harmony, hierarchy, intellectual autonomy, and mastery) that are interconnected and can be seen in three bipolar dimensions. These dimensions are conservatism (embeddedness) vs. intellectual and affective autonomy; hierarchy vs. egalitarianism; and mastery vs. harmony (Niu, Bell, Zagummy, Rahman, & Reid, 2013). These contrasting values reflect differing ways of solving problems that face all cultures: the degree to which people are embedded in the group; preservation of the social fabric; and relationship to the natural and social world (Niu et al., 2013).

Although researchers have of course studied all these dimensions, investigators have most often invoked IC in the study of cultural differences and similarities, and we will use IC here as an indicator of some of the characteristic findings and challenges that have emerged in the literature. Despite criticism that IC (as well as the other dimensions) lacks explanatory power to further our understanding of the psychology of cultures (Ratner & Hui, 2003), many studies have produced descriptions of cross-cultural similarities and differences on the IC dimension, and investigators have conducted many comparisons of cultural characteristics

associated with individualism and collectivism. Oyserman, Coon, and Kemmelmeier (2002), for example, carried out meta-analyses of more than 80 studies conducted within the U.S. and across many other cultures. Although they found general support for the widely held notion that European Americans tend to be more individualistic and less collectivistic than many other groups, Oyserman et al. criticized the common practice of researchers "to accept any cross-national difference as evidence of IND-COL processes" (p. 44). The latter observation is consistent with the earlier concern of Segall et al. (1999) that IC is an "overused dichotomy" (p. 217).

One way to attempt to avoid over-generalizations about the IC characteristics of cultures is to measure individualism and collectivism at the level of individual research participants. Triandis (1995; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988) termed the individual-level occurrence of collectivism allocentrism and individual-level individualism idiocentrism, and a number of researchers (e.g., Alavi & McCormick, 2007; Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997) have developed procedures intended to make individual-level IC measurements. Other researchers (e.g., Bernardo, Lising, & Shulruf, 2013; Chen, 2007; Sivadas, Bruvold, & Nelson, 2008) have investigated the cross-cultural validity of such scales. Their review of scales measuring individual IC allowed Oyserman et al. (2002) to identify psychological domains typically associated with individualism (independence, goal orientation, competition, uniqueness, privacy, self-knowledge, and directness of communication) or with collectivism (relationship to group, belonging, duty, group harmony, advice from others, importance of social context, hierarchy/status, and preference for group work). Such individual measurement of cultural dimensions allows researchers not only to avoid the tendency to stereotype whole cultures (e.g., Matsumoto, 2002), but also to attempt to account for such occurrences as the existence of idiocentric people in collectivist cultures and allocentric people in individualist cultures. Bond (2002) provided a cogent discussion of this issue, concluding that "Individualism-collectivism at the level of nations is not the same as individualism-collectivism at the level of individuals, either conceptually or operationally" (p. 76).

Despite the concerns about over-generalizing the role of cultural dimensions, Triandis et al. (1988) identified some key differences between collectivist and individualist *cultures*:

- 1 People in individualist cultures tend to have more in-groups.
- Collectivist cultures encourage significant vertical relationships (e.g., parent–child, supervisor–worker), while horizontal relationships (e.g., co-workers, spouses, friends) are more important in individualist cultures.
- 3 People in individualist cultures may be able to easily make friends, but many may be only acquaintances; collectivist people may be less skillful in making friends, but their friendships are likely to be intimate and long-lasting.
- 4 In-groups in individualist cultures may provide more rights and fewer obligations, but less security and support than those of collectivist cultures.

- 5 Collectivist cultures enable more stable in-group relationships, while individualists are more likely to leave an in-group that makes excessive demands.
- 6 For collectivist cultures, cooperation levels are high within in-groups, and lower with out-groups.

These IC characteristics are consistent with the notion that individualism suggests an independent, decontextualized orientation, in contrast to the contextualized, situation-based, detail-focused orientation of collectivism (Oyserman et al., 2002).

Although the IC dimension has produced a large body of fascinating cultural research, a wide range of other cultural dimensions exists. These dimensions include not only those that Hofstede and Hofstede (2004) have identified, but numerous others as well (Leung et al., 2002; Matsumoto & Yoo, 2006; Schwartz, 1999), including level of complexity and tightness (number of rules and norms) (Triandis, 1999). Although researchers have certainly studied a number of these other dimensions, additional work to increase our understanding of more cultural beliefs, attitudes, and values will no doubt expand not only the available cultural knowledge, but our ability to explain cultural differences and similarities, as well.

#### **Cultural Commonalities**

Although cultures may vary widely, they all share a common need to solve similar human problems, such as those associated with health, safety, reproduction, and, ultimately, survival (Matsumoto, 2006). Further, as some writers have argued, culture is not limited only to humans; other species, including chimpanzees, may well possess culture too, with some similarities to that of humans (Kendal, 2008). However, despite commonalities, much cross-cultural research in psychology has focused on identifying and describing the differences between cultures. Many of the studies describing psychological differences have done so without clear attempts to explain potential cultural foundations or causes for the differences (Ratner & Hui, 2003). Unfortunately, even in the absence of clear cultural explanations, researchers have sometimes drawn conclusions about presumed causes of differences, often in terms of dimensions like IC, even when groups also differ in other obvious ways (e.g., Segall et al., 1999). Clearly, continuing development of more sensitive research methods is an ongoing need (e.g., Creswell & Sinley, 2017; Wagner, Hansen, & Kronberger, 2014).

In fact, even when studies show differences between cultures, statistically significant differences may lack practical significance, and consideration of effect sizes (in lieu of simply reporting p values) may result in very different perspectives on such differences (Matsumoto, Grissom, & Dinnel, 2001). And, as world cultures continue to become more intermingled and globalized, our perceptions of the differences and similarities among them may well change (Shiraev & Levy, 2010). In the future, it will be important for researchers to

bring together the idiosyncratic findings of local and regional (indigenous) psychologies and continue to move toward a true global (cross-cultural) psychology (Poortinga, 2005).

#### Conclusion

In a world with far too much conflict, anger, and violence, increased understanding of culture—our own as well as others'—is perhaps the most pressing need for psychological science. Cross-cultural psychology promises to aid understanding of our differences and clarification of our similarities; but understanding will come only on the strength of sound methodology and accurate data. In the chapters that follow, we will see a variety of approaches to development of methods and knowledge that help to develop that understanding.

Psychological knowledge of culture has improved substantially since the early work of Rivers (1905) and Sumner (1906). And we have much more to offer students than Morgan and King (1966) did when I used their introductory psychology textbook more than a half century ago. Cross-cultural psychology is an accepted field of study, one that continues to advance toward the dual aims of meeting the rigorous standards of good science and building a level of credibility that will make it acceptable in the unique contexts of the cultures of the world. An important result will be the ability to think differently about ourselves, about others, and about our place in the world.

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# Ethnocentrism Seeing the World from Where We Stand

## Kenneth D. Keith

There is an old Asian proverb about the frog that lives in the well. The frog, it seems, is quite happy because, after all, the well is a perfectly good place, and the patch of sky he can see from the bottom of his well is a perfectly nice bit of sky. The frog has no need for, nor any interest in, any place but his own. Like the frog in the well, we are all prone to elevate our own place or our own culture as the standard against which we judge others, and to see our own as superior to others. This tendency is known as ethnocentrism (Berry, Poortinga, Segall, & Dasen, 2002). In this chapter, we discuss the concept of ethnocentrism: Who is ethnocentric, how do we become ethnocentric, and how can we reduce ethnocentrism?

Ethnocentrism is likely universal among humans (LeVine & Campbell, 1972; Matsumoto & Juang, 2013) and first appeared in the literature more than a century ago in the writings of W. G. Sumner (1906), although it was even earlier when Charles Darwin (1874) noted that tribes tended to be more sympathetic to their own groups than to others. Modern researchers have investigated ethnocentrism in a range of arenas, including religion (Banyasz, Tokar, & Kaut, 2014), shopping habits (Guo & Zhou, 2017), and attitudes toward immigrants (Banks, 2016).

Ethnocentrism often serves to create perceptions of cross-cultural difference, with resulting intercultural conflict and negative stereotypes (Triandis, 1994); it is thus important to successful intergroup relationships, and our efforts to improve them, that we develop an understanding of ethnocentrism: its characteristics, causes, and amelioration.

## What Are the Characteristics of Ethnocentrism?

## The Classic Perspective

Ethnocentrism has its roots in words implying feelings and judgments that are centered ("centrism") in an individual's own cultural or ethnic ("ethno") context (Brislin, 2000), and frequently involves: (a) perceiving outsiders with suspicion (Price & Crapo, 2002), and (b) individual tendencies toward group self-centeredness (Bizumic & Duckitt, 2007). Further, we seem to want to be near others who are like us, and we feel different from, and sometimes fearful of, those who are not like us (Strickland, 2000).

The result, Sumner (1906) suggested, is a division between in-groups and outgroups, in which in-group members consider their own practices the standard against which they measure out-groups. Members of the in-group are likely to see themselves as superior to (Hooghe, 2008), and more possessed of virtue than (Hammond & Axelrod, 2006), out-group members. The traditional Sumnerian view includes not only elevation of one's own group, but also negative attitudes toward the "other," the out-group. The potential for negative assessment increases with greater differences between the groups (Berry et al., 2002). And, as Raden (2003) noted, Sumner concerned himself primarily with unitary, homogeneous groups with clearly external out-groups. This was likely due, at least in part, to the fact that Sumner studied groups that found it necessary to unite against other groups in the interest of survival—an idea consistent with the finding of Pratto and Glasford (2008) that individuals value the lives of their in-group members more than those of an out-group when the groups are in competition. Sumner (1906) pointed out, for example, that Jews divided people between themselves (in-group) and Gentiles (out-group), and that the Greeks and Romans (in-groups) saw all others as barbarians (out-groups).

## A Contemporary View

Research today, particularly in cultures as diverse as the U.S., often involves studies in which one racial or ethnic subgroup is the in-group, and other groups, although internal to the country, are out-groups (Raden, 2003); and studies have generally continued to support the notion that positive feelings for the in-group and negative feelings for out-groups bear a reciprocal relation to each other (Brewer, 1999). However, as Brewer (1999, 2007) reported, data from many groups have shown that, although individuals tend to be differentially positive toward their in-group, these attitudes may be independent of their attitudes toward out-groups. In other words, we can have positive feelings toward members of our in-groups without corresponding attitudes of disdain or hostility toward out-groups—a perspective

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supported by the work of Khan and Liu (2008), who found, in a study of Indians and Pakistanis, more support for favoring the in-group than for disfavoring the out-group.

Bizumic and Duckitt (2007), in a study of three varieties of group self-centeredness (ethnocentrism, fundamentalism, and anthropocentrism) among Australian university students, found that individuals who strongly favor their own human groups over others also tend to favor humans over other species. Thus, prejudice against animals was related to self-centeredness in relation to human out-groups. However, ethnocentrism, like the other forms of self-centeredness, correlated with negative feelings toward specific relevant out-groups, but not toward outgroups in general. Further, although Raden (2003) found classic (Sumnerian) ethnocentrism (i.e., positive attitudes toward the in-group, hostility toward the out-group) among some subgroups of a large probability sample of white Americans, in-group bias (without the implication of unfavorable views of outgroups) was more prevalent in his sample. This finding led Raden to point up the methodological importance of the distinction between the classic form of ethnocentrism and the more common in-group bias, suggesting that the latter may be a midpoint between the extremes of classic ethnocentrism and the absence of ethnocentrism. In an effort to clarify what is and is not ethnocentrism, Bizumic and Duckitt (2012) noted that ethnocentrism is more than just outgroup negativity and ingroup positivity. Such current work indicates that the occurrence of ethnocentrism, in its contemporary incarnation, is more complex and more nuanced than the Sumnerian perspective might suggest.

## Who Is Ethnocentric?

Many writers have discussed the universal tendency of humans to be ethnocentric (e.g., LeVine & Campbell, 1972; Neuliep, Hintz, & McCroskey, 2005; Shuya, 2007). Researchers have studied ethnocentrism in relation to ethnic minorities within the United States (Gittler, 1972; Hraba, 1972; Mutisya & Ross, 2005; Prothro, 1952; Raden, 2003), in attitudes toward immigrants (Valentino, Brader, & Jardina, 2013), across nationalities (Beswick, 1972; Cashdan, 2001; Khan & Liu, 2008; Li & Liu, 1975), in the tendencies of consumers to buy domestic products (Chryssochoidis, Krystallis, & Perreas, 2007; Fernández-Ferrin, Calvo-Turrientes, Bande, Artaraz-Miñón, & Galán-Ladero, 2018; Hsu & Nien, 2008; Nguyen, Nguyen, & Barrett, 2008; Vida, 2008), and toward people with disabilities (Chesler, 1965). Ethnocentrism has also been manifest in perceptions of intercultural attractiveness and competence of individuals from other cultures (Neuliep et al., 2005).

Sumner (1906) recounted a long list of cultural groups (including Lapps, Kiowa, Caribs, Greenlanders, Jews, Seri, and others) that developed terms denoting their respective groups as uniquely "men," "people," "chosen," or otherwise superior. And, of course, researchers, being human themselves, are also subject to

ethnocentrism (Hofstede, 2007). Thus, ethnocentric bias exists not only at the levels of the individual and intergroup relations, but also at the level of the scientists who study psychological phenomena across cultures (e.g., Berry et al., 2002; Hofstede, 2007). Campbell (1970), among others, has proposed research methodologies designed to ameliorate the contaminating influence of ethnocentrism in social science investigations.

Everyone, it seems, is ethnocentric or at least potentially susceptible to ethnocentrism. It seems clear, as Matsumoto and Juang (2013, p. 390) suggested, that "we all have our cultural filters when we perceive others," and that "it follows that just about everyone in the world is ethnocentric." Inevitably, we see the world from the only vantage point we know—our own.

## **How Does Ethnocentrism Develop?**

Researchers have studied ethnocentrism from a variety of perspectives, some of them biological, and others entailing a number of psychological variables. Here we review some essential aspects of our understanding of the development of ethnocentrism from different points of view.

## **Biological Perspectives**

Ethnocentrism may seem to be "automatic" (LeBaron, 2003), as a part of the enculturation of children within a society; a process in which some see the child learning its culture and its attitudes as a kind of tabula rasa (LeVine, 1982). On the other hand, some writers have argued for an evolutionary basis for ethnocentrism. Wilson (1978), for example, raised the possibility that biological advantage might accrue to ethnocentric tribal groups, not only from aggression but also from other associated behaviors. Wilson argued that particular behaviors (e.g., specific forms of aggression) are not genetically transmitted, but that cultural structures supporting them may have been. Thus, adaptive groups were those that successfully divided the world between "us" and "them." Similarly, Thayer (2004) set forth the proposition that evolution has equipped humans with an affinity for those who are biologically related; thus, this view would suggest, people should be expected to support first their immediate family, then other relatives, then their ethnic group, and finally others. This perspective, Thayer said, does not mean ethnocentrism is not subject to environmental influence (e.g., culture, religion, political beliefs), but it does recognize the natural tendency to favor those who are biologically related, and there is some evidence to suggest that an ethnically homogeneous culture (in which people might be assumed to be more biologically similar) may manifest higher levels of ethnocentrism than a more diverse one (Neuliep, Chaudoir, & McCroskey, 2001).

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Perceived vulnerability to disease may give rise to negative attitudes toward out-group members (Faulkner, Schaller, Park, & Duncan, 2004). Navarrette, Fessler, and Eng (2007), in a study testing this disease-threat model for intergroup attitudes, found that pregnant women were most ethnocentric during the first (and most vulnerable) trimester of their pregnancy—a finding consistent with the model and supportive of the role of biological factors as an influence on ethnocentrism. In another investigation, Navarrette and Fessler (2006) gathered data indicating an increase in ethnocentrism in individuals who perceived an increased vulnerability to disease—supporting the notion that, because ingroup members may present less risk of disease than out-group contacts, individuals may have mental approach and avoidance mechanisms that predispose them to ethnocentric behaviors (e.g., Faulkner et al., 2004). And, although such cognitive processes might be assumed to be involved in ethnocentrism, there is some evidence simply for an individual predisposition to favor in-groups (Hammond & Axelrod, 2006)—a notion that Fincher, Thornhill, Murray, and Schaller (2008) extended to the possibility that collectivism, which places high value on the in-group, may have evolved as an adaptation to risk of disease from out-groups. Other researchers (e.g., Chiao et al., 2010; Zhu, Zhang, Fan, & Han, 2007) have found differences in brain activity between individuals with independent (i.e., individualistic) views of self and those with interdependent (i.e., collectivistic) self-construals. See Gharib (2018) for an interesting discussion of this topic.

On the other hand, Roberts (1997) did not find a significant correlation between ethnocentrism and reproductive success in a study of two distinct ethnic groups in India—perhaps casting doubt on the presumption of evolutionary advantage of ethnocentrism (although such an advantage may well have once existed for such groups). Ross (1991), in suggesting the incompleteness of a sociobiological explanation for ethnocentrism, argued instead for the possibility of a *cultural* evolutionary process. Simon (1980), in discussing the relation between genetics and human nature, enumerated several cultural universals and suggested that there is not sufficient evidence to conclude that they are or are not genetically based. Ethnocentrism may well be one such universal and, as we will see in Chapter 7, it is likely that biological and psychological influences bear a reciprocal relationship to each other in the evolution of culture and psychological processes.

## Psychological Variables

Scientists have studied a number of psychosocial variables that appear to be related to the behaviors we call ethnocentrism. Some of these are narcissism, religious fundamentalism, major personality traits, intolerance for ambiguity, and authoritarianism. Numerous studies have shown that ethnocentrism may decrease over time, as group members develop experience with both the in-group and

out-groups, and views of out-groups may become more positive with experience (Ryan & Bogart, 1997). Perhaps more interesting is the fact that researchers have found ethnocentrism related in various ways to characteristics that we might place on a continuum of "open-mindedness." For example, Bizumic and Duckitt (2008), in a sample of university students in New Zealand, found a positive relationship between narcissism (self-centeredness) and intergroup ethnocentrism, leading the researchers to suggest that narcissism may predispose individuals to hold ethnocentric attitudes. Similarly, Altemeyer (2003), studying Canadian students, found significant correlations between religious fundamentalism, Manitoba ethnocentrism (Altemeyer, 1996), and religious ethnocentrism; in other words, those scoring high on religious fundamentalism also tended to be ethnocentric—toward other religions and other sociocultural groups.

Altemeyer's (2003) religious fundamentalist participants reported coming from homes in which religion was a focus of emphasis from an early age, and, he said, had a "very small 'us' and quite a large 'them' when it comes to faith" (p. 27). The connection between religion and ethnocentrism is not limited to Canadians. For example, working in India with Hindu and Muslim adolescents, and comparing them to nonreligious individuals, Hasnain (2007) found religious persons in both groups to be significantly more prejudiced and ethnocentric than the nonreligious participants, and in a meta-analysis spanning 28 studies, McCleary, Quillivan, Foster, and Williams (2011) found a significant correlation between ethnocentrism and fundamentalist religious views.

In a study investigating the attitudes of American university students toward foreign-born and domestic instructors, de Oliveira, Braun, Carlson, and de Oliveira (2009) measured Big Five personality traits of the students (McCrae & Costa, 1999) as well as attitudes toward the instructors. Among their findings, these researchers found an ethnocentric bias against the foreign-born instructors (whom students apparently saw as out-group members), while the student traits of agreeableness and conscientiousness were positively correlated with positive attitudes toward the foreign-born teachers. de Oliveira et al. also reported an inverse relation between attitudes toward the two instructor conditions (i.e., students who liked one instructor group more tended to like the other instructor group less)—a finding that would seem consistent with the classical version of ethnocentrism. Siegman (1958) studied the effect of cultural factors on the relation between ethnocentrism and neuroticism and intelligence, concluding that the connection between ethnocentrism and the two personal characteristics (neuroticism and intelligence), may be lessened in the context of a culture that condones ethnocentric attitudes; the implication of this finding would seem to be (not surprisingly) that an approving cultural backdrop is a powerful contributor to individual ethnocentrism.

There is a long history of research investigating the relation of other personal traits to ethnocentrism. Noting the similarity in descriptions of intolerance for

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ambiguity and for ethnocentrism, Block and Block (1951) designed research to study the relation between these characteristics. Using a laboratory task and a sample of American university students, these investigators reported that participants considered intolerant of ambiguity were more ethnocentric than those considered tolerant of ambiguity. Taft (1956) employed a variation on the methods used by Block and Block (1951) to study ethnocentrism and intolerance of ambiguity in an Australian group, with similar conclusions: Those intolerant of ambiguity also scored significantly higher on a measure of ethnocentrism. O'Connor (1952), studying a sample of American students, also found similar results: She reported a significant correlation between intolerance for ambiguity and ethnocentrism; she also noted a significant difference between people assessed as high in ethnocentrism and those low in ethnocentrism on a measure of intolerance of ambiguity (those high in ethnocentrism also scored higher on intolerance of ambiguity). More recently, Cargile (2013) found that ethnocentrism in students was reduced by uncertainty tolerance (but not by cultural knowledge)—individuals less able to tolerate uncertainty were more ethnocentric.

Parents, of course, play a role in the development of ethnocentrism in their children, and researchers have studied parental characteristics and parenting styles in this context. Thomas (1975) assessed parents for authoritarianism (the tendency to favor absolute obedience to authority) in seven Pacific Island cultures, finding authoritarian parenting characteristics in three of the groups (Tahiti, Cook Islands, and Samoa). In each of these three cultures, authoritarianism was positively correlated with ethnocentrism. A number of studies have shown a relation between parental characteristics and behavior and ethnocentrism in their children. Epstein and Komorita (1966), for example, found that childhood ethnocentrism was related to the interaction between parental ethnocentrism and punitiveness. In particular, parents who used moderately punitive disciplinary approaches were more likely to have children who shared their parents' ethnocentric attitudes. Mosher and Scodel (1960), in a study of Midwestern American schoolchildren and their mothers, found that the children's ethnocentrism was correlated with that of their mothers, but not with the mothers' authoritarianism.

In two Dutch samples, Van IJzendoorn (2001) found significant correlations between ethnocentrism and authoritarianism in both high school and university students. This study also revealed negative correlations, for both groups, between moral judgment and both ethnocentrism and authoritarianism. Likewise, in an investigation measuring ethnocentrism and authoritarianism of adolescents and parents in two Hungarian cities, both groups showed a significant relation between these two variables (Todosijević & Enyedi, 2002). Finally, Triandis (2009) discussed the characteristics of simple cognition, suggesting that simple cognition may be engendered by authoritarian teaching—an interesting observation in light of the fact that simple cognition may in turn predict authoritarianism and ethnocentrism (Kemmelmeier, 2010).

## Summary

In summary, we can say that scientists of various points of view have proposed numerous explanations for ethnocentrism. It seems likely that ethnocentrism has evolutionary underpinnings, but it is equally evident that it is linked to a variety of environmental/cultural and personal influences, including parental characteristics and individual traits. Bias favoring the in-group may help individuals to organize their experience and reduce uncertainty (Druckman, 2006)—perhaps contributing to efforts to explain the relation of highly structured views, in the form of authoritarianism and fundamentalism, to ethnocentrism.

Although ethnocentrism may contribute, via evolutionary mechanisms, to the survival and integrity of groups, there is nevertheless abundant evidence of the challenges and obstacles posed by ethnocentrism at the interpersonal and intercultural levels. This state of affairs of course presents concerns for intergroup understanding and relations (Brewer & Brown, 1998). We might, therefore, logically ask whether there are ways to overcome the effects of this universal phenomenon.

#### Can We Reduce Our Ethnocentrism?

Cross-cultural psychology has made attempts not only to understand the ethnocentric limits of our cultural/scientific knowledge (Berry et al., 2002), but also to find ways to decrease ethnocentrism among individuals. Brislin (2000) has pointed out that interaction with people of other cultures is likely to challenge our ethnocentric perspectives, and numerous writers have suggested that such contact will reduce ethnocentrism. This is not always the case, however (Brewer & Brown, 1998). In this section, we review the potential effects of education and related variables on the ethnocentrism of individual people.

## Role of Education

## Higher education

Hooghe (2008) reported that high levels of education may reduce ethnocentrism. This assertion found support in two studies conducted by Plant (1958a, 1958b) more than 60 years ago. In one of these studies, Plant (1958b) administered the ethnocentrism scale from *The authoritarian personality* (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950) to a sample of American college students, 755 of whom were still available for testing 2 years later. Of the 755, 505 had completed 2 years of college, and showed significantly reduced ethnocentrism at follow-up. The remaining 250 participants did not continue in college or withdrew before the

2-year follow-up; this group showed no significant changes in measured ethnocentrism. In this study, Plant also found a significant sex difference, with men showing higher levels of ethnocentrism than women—a finding consistent with other discussions of ethnocentrism (Hooghe, 2008; Kemmelmeier, 2010).

In the second study, Plant (1958a) used a modified version of the Total Ethnocentrism Scale: Public Opinion Questionnaire E, again from the work of Adorno et al. (1950). Of 1,030 students completing the measure as entering college students, Plant invited 315 to be retested at the end of their 4-year college career. Of the 315 eligible students, 271 (86%) completed the retest. Both male and female students produced significantly lower ethnocentrism scores following their 4 years of college. Scores for men were higher than those for women at the time of both the initial testing and the retesting, and Plant's analysis of the difference in shift scores indicated that female students' scores were reduced significantly more than those of males. We should note that in this study, Plant did not report scores for a non-student control group.

In a large study in the Netherlands, Meeusen, de Vroome, and Hooghe (2013) found a negative correlation between ethnocentrism and level of education, although the role of education, per se, was not clear (occupation and cognitive ability correlated with education, and may have been contributors to reduced ethnocentrism).

## Specific courses

In another study, designed to more specifically examine the effects of studying cross-cultural psychology on ethnocentrism, Pettijohn and Naples (2009) conducted a comparative investigation across two undergraduate courses: cross-cultural psychology and introductory psychology. Fifty-nine students in these two courses completed the U.S. Ethnocentrism Scale (Neuliep & McCroskey, 1997) and the revised Generalized Ethnocentrism Scale (Neuliep, 2002) at the beginning and completion of their respective courses. These researchers found a significantly greater decrease in ethnocentrism, on both measures, for the cross-cultural students (who decreased their scores on both tests) than for the introductory psychology students (whose scores did not decrease significantly on either measure). This study had numerous limitations, including a number of pre-existing differences between the groups; nevertheless, it suggests that exposure to the content material of cross-cultural psychology may have the capacity to aid in overcoming ethnocentrism.

Borden (2007) reported another educational effort aimed toward reduction of ethnocentrism. She studied university students in two sections of an intercultural communication course, evaluating effects on ethnocentrism of their experience in service learning projects conducted in community settings serving ethnic minorities and international students. Borden used the Generalized Ethnocentrism Scale (Neuliep, 2002) as a pretest and posttest, administering it to students at the beginning of the course and again at the end. This report was essentially an effort to test

the so-called "contact hypothesis"—the notion that contact between groups may reduce tension between them (Allport, 1954). The results indicated a significant reduction in ethnocentrism in students completing the service learning experience, suggesting a possible role for such exposure as a means to reduce ethnocentrism. However, the absence of a comparison group and other standard control measures makes it necessary to interpret this project with caution.

Further, as Brewer and Brown (1998) pointed out, the contact hypothesis has often been contradicted by experience. Specifically, as Brewer and Brown explained, the contact hypothesis, or simple exposure to other groups, is likely to succeed only if certain additional factors (social and institutional support, potential for meaningful relationships, equal status between groups, and intergroup cooperation) are in place.

#### Predictive variables

Dong, Day, and Collaço (2008) investigated the possible role of intercultural communication sensitivity and multiculturalism as predictors of ethnocentrism. They administered the Intercultural Sensitivity Scale (Chen & Starosta, 2000), a multicultural ideology scale (Berry & Kalin, 1995), and the Generalized Ethnocentrism Scale (Neuliep, 2002) to 419 American undergraduate students, most of them Caucasians and Asian Americans.

Dong et al. reported significant correlations between both the intercultural sensitivity and multicultural ideology measures and the Generalized Ethnocentrism Scale and suggested the possibility that increasing intercultural sensitivity and multicultural appreciation (e.g., through educational advocacy, neighborhood and community education, and one-to-one intercultural experience) might reduce ethnocentrism. In a similar vein, Chen (2010), also using the Intercultural Sensitivity Scale, found that intercultural engagement was a predictor for ethnocentrism. However, these correlational studies, while perhaps identifying promising variables for future research, did not demonstrate a causal connection among these measures. It may simply be the case that individuals who are more ethnocentric are naturally less interculturally sensitive and less multiculturally ideologic, or that all these measures are the product of some other cause. Dong et al. were correct, however, in observing that few empirical studies have investigated specific variables that could decrease levels of ethnocentrism.

## Summary

Despite the universality of ethnocentrism, we have some evidence that culture and experience may influence its occurrence. Thus, students in different cultures show differing levels of ethnocentrism. Specifically, Japanese students have shown higher levels of ethnocentrism than Americans (Neuliep et al., 2001), as have Chinese students (Li & Liu, 1975; Shuya, 2007). Thus, although the evidence suggests the

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universality of ethnocentrism, levels seem to vary from culture to culture. And some research findings have indicated tentative relations between education as a mitigating factor and ethnocentrism, and between ethnocentrism and experience in specific courses. However, although exposure to cultural subgroups may hold promise in the effort to overcome ethnocentrism, we know we must be skeptical of claims that exposure alone will achieve this end, although exposure to people and their diversity is likely to play a contributing role in reducing ethnocentrism.

### Conclusion

Ethnocentrism has appeared in the sociocultural literature for more than a century, and we believe it to be a universal human phenomenon. We have seen that ethnocentrism may take different forms—specifically with or without hostility toward out-groups—but always involving the tendency to elevate one's own group (in-group). Although ethnocentrism may have evolutionary roots, researchers have identified a number of psychological traits and conditions associated with it. Studies investigating these psychological variables have generally been correlational in nature or have lacked sufficient experimental controls to allow causal inferences; research has nevertheless suggested a connection between ethnocentrism and authoritarianism and between ethnocentrism and fundamentalism.

Although ethnocentrism has sometimes decreased with educational experience and intergroup exposure, the studies demonstrating this have lacked the scientific rigor necessary to show causal connections. Further, intergroup exposure seems to require additional supports and relationships to reliably influence out-group prejudice. The base of empirical research directed toward reducing ethnocentrism is sparse; more work will be needed if we are to fully understand this important cultural phenomenon. Only then perhaps, unlike the proverbial frog, will we get beyond our isolated well and our own little patch of sky.

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## Cross-Cultural Competence

## Chi-yue Chiu and Yuanyuan Shi

The world is more connected than ever. In a survey of 900 global business organizations conducted by PricewaterhouseCoopers International (PwC) in 2010, the average number of international assignees in a large organization had increased from 200 in 1998 to 250 in 2009, and the average number of locations the international assignees came from in a global organization had increased from 13 in 1998 to 22 in 2009. Another survey of more than 4,000 millennials from 23 countries¹ further showed that the millennial generation now views overseas assignments as a rite of passage: On average, 80% of the millennials from these 23 countries wanted to work outside their home country during their careers (PwC, 2010).

In academia, research has also become increasingly international. Research statistics published by the US National Science Foundation in January 2016 showed that between 2000 and 2013, the percentage of publications with authors from multiple countries rose from 13.2% to 19.2% (Witze, 2016). These global developmental trends underscore the importance of the ability to navigate cultural currents in a way that enables individuals to adjust to, learn from, manage, and change cultures for the well-being of individuals and their increasingly globalized societies. This ability is cross-cultural competence.

## **Conceptualizing Cross-Cultural Competence**

Cross-cultural competence can be conceptualized both as a set of attributes (personal qualities characteristic of certain individuals) or as a kind of expertise (level of proficiency in the learning, application, and creation of cross-cultural knowledge).

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Indeed, most initial attempts to define cross-cultural competence have taken the attribute approach, although we posit that an expertise approach may offer a more nuanced understanding of the construct. In the following sections, we will introduce both approaches, explicate the relation between cultural immersion and expertise development, and discuss the implications of the expertise approach for the conceptualization, measurement and training of cross-cultural competence.

## Cross-Cultural Competence as Attributes

In her analysis of expert opinions on the definition of cross-cultural competence, Deardorff (2006) noted that there is consensus among experts that cross-cultural competence is the "ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills and attitudes" (pp. 247–248). Indeed, much research on cross-cultural competence has focused on identifying and measuring the intercultural knowledge, attitudes, skills, and other attributes (KASO) that predict individual well-being and adjustment in intercultural contexts.

Some researchers have adopted an inductive approach to identifying cross-cultural competence attributes. For example, Hammer, Gudykunst, and Wiseman (1978) asked American college students to identify attributes that were conceptually relevant to intercultural effectiveness and then rate the importance of these attributes to effective functioning in cross-cultural contexts. Next, they used exploratory factor analysis to analyze these ratings, and the results showed that intercultural effectiveness has three major dimensions: (a) the ability to manage psychological stress, (b) the ability to communicate effectively, and (c) the ability to establish interpersonal relationships. Likewise, research by Chen and Starosta (2000) suggested that cross-cultural competence incorporates (a) the ability to comprehend and appreciate cultural differences, (b) the ability to understand the psychological influence of culture, and (c) effectiveness in intercultural communication and interactions.

Treating and measuring cross-cultural competence as a constellation of culture-specific knowledge, attitudes, and skills are still a popular perspective in cross-cultural competence research (see Chiu, Lonner, Matsumoto, & Ward, 2013). However, there is still limited consensus on what personal attributes are central to cross-cultural competence. Leung, Ang, and Tan (2014) noted that researchers taking an attribute approach to cross-cultural competence have identified over 300 conceptually relevant personal attributes and more than 30 multi-faceted models of cross-cultural competence. Ruben (1989) has queried whether cross-cultural competence is best understood as a constellation of knowledge, attitudes, and skills, and how cross-cultural competence should be distinguished from constructs such as adjustment and adaptation.

## Cross-Cultural Competence as Expertise

Cross-cultural competence can also be conceptualized as a form of expertise, or more specifically as the proficiency in acquiring, representing, applying, and creating cultural knowledge. Dreyfus (2004) has proposed a stage model of skill acquisition. According to this model, people acquiring a learned skill will typically pass from the stage of novice to that of advanced beginner, competent, proficient, and expert, with characteristic patterns of knowledge representation and application at each stage. We borrow this model and revise it to suit the context of cross-cultural competence.

As illustrated in Figure 3.1, individuals at the Novice stage of cross-cultural competence have acquired superficial, stereotypic, and decontextualized knowledge of different cultures, view cultural differences categorically, and apply cross-cultural knowledge non-discriminatively (Kashima et al., 2005). An example is to assume that all Americans behave in individualist manners and all Japanese behave in collectivist manners in all situations. Indiscriminate application of cultural stereotypes can create decision biases against maligned groups, such as the racial bias in police decisions to shoot a suspect in an unsafe environment (Kahn & Davies, 2017). Moreover, when a decision bias is detected, a novice has no clues how it can be corrected.

At the stage of Advanced Beginner, cultural knowledge is contextualized (Klafehn, Benerjee, & Chiu, 2008). Individuals become aware of not only the modal psychological differences across cultures (e.g., most Americans are individualist and most Japanese are collectivist), but they also recognize within-cultural variations as well as cross-situational variability in the modal attributes



Novice	Advanced beginner	Competent	Proficient	Expert
Reliance on decontextualized cultural stereotypes	Possess contextualized cultural knowledge tools	Apply context- appropriate cultural knowledge to improve performance;	Has developed an intuitive sense of what goals to pursue given the situation and choose goalappropriate cultural knowledge tools	Has strong intuition of what is important and what is not; Can automatically apply and create context- appropriate knowledge
Stereotype → behavior	Context → Knowledge → behavior	Context → Knowledge → behavior → performance	Context → Goal → Knowledge → Behavior → Performance	Context → Goal → Knowledge → Behavior/Innovation → Performance

**Figure 3.1** A stage model of cross-cultural competence.

(e.g., most Americans are individualist most of the time in most situations, but some Americans are collectivist some of the time in some situations). What cultural knowledge (e.g., cultural norms, scripts) will be applied depends on the assessment of the context. Having accurate contextualized cultural knowledge is associated with better intercultural adjustment. For example, migrants with more accurate knowledge of the distribution of values in the host culture tend to have a better quality of interaction with people in the host culture; these migrants are more able to form good relationships with members of the culture and are more successful in attaining personal goals (Li & Hong, 2001).

Chiu and Hong (2006) contended that "a hallmark of competent cultural behavior is the ability to switch the mode of interpretation flexibly and adaptively as individuals navigate situations across different cultural contexts" (p. 266). Such flexibility becomes evident at the Competent stage. At this stage, individuals track the consequences of applying different cultural knowledge tools (e.g., scripts and norms) in different situations, and constantly update and fine tune their representations of cultural knowledge based on feedback information (Savani, Morris, Naidu, Kumar, & Berlia, 2011). As the cultural knowledge of these individuals becomes more nuanced, more contextualized, and more responsive to the specific demands of the changing situations, their behaviors increase in flexibility and cultural-appropriateness.

At the stage of Proficient, individuals are psychologically involved in both the context-appropriateness and goal relevance of their cultural knowledge application. They intuit what goals are relevant in a cross-cultural context, and what cultural knowledge will produce results that are instrumental to attaining these goals. At this stage, individuals are no longer just coping with or adapting to the changing demands of varying cultural contexts, they participate actively in culture, express their agency via culture, and sample cultural tools from their cultural toolkit to pursue their valued goals (Chiu & Hong, 2005).

As this intuition grows in strength, selection of context-appropriate goals and cultural tools will eventually become automatic. Individuals also develop the capability to treat knowledge from diverse cultures as intellectual resources and innovate cultural tools by creatively blending existing ones. At this stage, individuals are experts in both tool use and tool creation.

Although most models of cross-cultural competence are based on the attribute approach, two models have strong intellectual links to the expertise approach. The first model is the cultural intelligence model, which treats cross-cultural competence as a form of human intelligence (Ang, Van Dyne, & Rockstuhl, 2015). According to this model, culturally intelligent people are those who have the capabilities to function effectively in intercultural environments. These capabilities include (a) the mental capability to acquire and understand cultural knowledge, (b) the possession of rich knowledge about cultures, (c) the ability to direct and sustain effort to enhance functioning in intercultural situations, and (d) the capacity to behave flexibly in cross-cultural interactions (Ang et al., 2015).

The second model is the cultural competence model proposed by Chiu and Hong (2005). According to this model, expertise in navigating cultural currents requires (a) the possession of nuanced knowledge of the distributions of ideas and practices between and within cultures, (b) flexible use of cultural knowledge in goal-oriented intercultural interactions, and (c) the use of knowledge from diverse cultures to generate new knowledge.

These two models share the assumption that cross-cultural competence ensues from expertise in the acquisition and application of cultural knowledge. Both models also assume that cross-cultural competence can be nurtured through training and development (Ang et al., 2015) and multicultural experiences (Leung, Maddux, Galinsky, & Chiu, 2008). Indeed, a key feature that distinguishes attribute models (which focus on relatively stable or static individual differences) and expertise model (which emphasizes "practice makes perfect") is the positive role of cultural immersion in the development of cross-cultural competence.

## **Cultural Immersion and Cross-Cultural Competence**

As mentioned in the previous section, characteristics that mark the transition to higher levels of cross-cultural expertise are (a) accuracy in the cognitive representation of the distribution of cultural knowledge between cultures and within a culture, (b) flexibility in the use of context-appropriate cultural tools to guide behaviors, (c) selection of context-appropriate goals and their effective means, (d) automaticity in the choice of context-appropriate goals and means, and (e) the ability to combine knowledge from diverse cultures to generate new knowledge. There is consistent evidence that cultural immersion, which affords opportunities for repeated practices of cultural skills, can help individuals improve on these characteristics.

## Accuracy in Cultural Knowledge Representation

Recent research shows that individuals acquire cultural knowledge through explicit learning (studying relevant cultural materials), observations and interpretation of practices in foreign cultures, and instrumental conditioning (Morris, Savani, Mor, & Cho, 2014). Instrumental conditioning involves making decisions in cross-cultural section (e.g., decide to accommodate or resist social influence in specific cultural contexts) and receiving feedback on the cultural appropriateness of the decision (Savani et al., 2011). People also acquire cultural knowledge through implicit learning. Based on how frequently they have been exposed incidentally to certain objects in a culture, people can infer how familiar these objects are to the people in the culture (Kwan, Yap, & Chiu, 2015).

Given how cultural knowledge is acquired, not surprisingly, research that compared behaviors and performance of individuals with different degrees of cultural immersion found that those who have more opportunities to immerse in foreign cultures (e.g., those who have lived in multicultural environments for an extended period of time) tend to have accurate representations of knowledge in the cultures they have lived in. For example, in one study (Leung, Lee & Chiu, 2013, Study 1), participants were presented with landmarks in Hong Kong and New York, and then asked to estimate the percentage of Hong Kong/New York college students who could correctly name each of these landmarks. The participants were either Hong Kong Chinese students who had frequent exposure to both Hong Kong and New York cultures, or New York students who had frequent exposure to New York culture only. Hong Kong students were accurate in their estimation of the relative familiarity of the landmarks to Hong Kongers and New Yorkers, and New York students were accurate in their estimation of the relative familiarity of the landmarks to New Yorkers only. In this study, accuracy in estimation was determined by comparing the estimated responses (e.g., estimated percentage of New York students who could name a certain landmark correctly) with the corresponding actual responses (e.g., the actual percentage of New York students who named the landmark correctly).

## Flexibility in the Use of Cultural Tools

Once multicultural individuals have acquired knowledge about the diverse cultures they have lived in, their cultural knowledge toolkit has expanded. Now, they can choose the cultural tools that are most useful to guide sense-making and behavioral decisions in specific contexts. To decide which tool to use, multicultural individuals will scan the environment for suggestions. When there are environmental cues (e.g., a salient cultural icon, the cultural identity of the addressee in communication) that signal the distinctive relevance of the knowledge tools from a certain culture, those tools will be retrieved from memory and guide interpretations of the situation and actions (Hong, Morris, Chiu, & Benet-Martinez, 2000).

Consistent with this idea, research also found that individuals with more opportunities for multicultural immersion are more able to discriminatively and flexibly switch cultural frames when interpreting ambiguous behaviors (Hong et al., 2000; Sui, Zhu, & Chiu, 2007; Verkuyten & Pouliasi, 2002; Wong & Hong, 2005). In an early demonstration of this frame-switching phenomenon, Hong, Chiu, and Kung (1997) presented a picture of a fish swimming in front of other fish and asked the participants to explain the behaviors of the fish in the front. Both American and Hong Kong Chinese participants spontaneously generated more dispositional explanations (e.g., it wants to get the food first) and fewer situational explanations (e.g., it is being chased by other fish) after they had been incidentally exposed to

pictures of American cultural icons (e.g., Mickey Mouse) than after they had been incidentally exposed to culture-unrelated pictures (e.g., pictures of different cloud formations). This happened because both American and Hong Kong Chinese participants were familiar with American culture, and the presence of American cultural icons activated the participants' American cultural knowledge. However, only Hong Kong Chinese college students spontaneously generated more situational explanations and fewer dispositional explanations after they had previously been exposed to pictures of Chinese cultural icons (e.g., Chinese calligraphy) versus culture-unrelated pictures. This is because only Hong Kong Chinese participants had been exposed extensively to Chinese culture. This result shows that bicultural experiences can enhance the Hong Kong participants' sensitivity to the changing cultural significance of the situation, which enables them to flexibly switch to the context-relevant interpretive frame.

Evidence for flexible cultural frame-switching has also been found in studies that used different bicultural samples (e.g., Greek-Dutch biculturals; Verkuyten & Pouliasi, 2002) and different kinds of contextual priming (e.g., communication context; Leung et al., 2013). For example, Hong Kong Chinese spontaneously communicated more dispositional explanations in the fish test when they expected the addressee to be an American than when they expected the addressee to be a Chinese person, expecting a stronger preference for dispositional explanations in American culture than in Chinese culture (Zou et al., 2009).

Aside from interpretive frames, bicultural individuals also switch behavioral scripts in response to different environmental elicitations. For example, Hong Kong Chinese cooperate more after being primed with Chinese culture and compete more after being primed with American culture (Wong & Hong, 2005). In the Leung et al. (2013, Study 1) study mentioned above, when asked to describe a landmark to an American audience, Hong Kong participants used shorter descriptions when they expected the landmark to be more well-known to most Americans, and provided more details in the descriptions when they expected the landmark to be unfamiliar to most Americans. Likewise, when asked to describe landmarks to other Hong Kong people, the Hong Kong participants used briefer descriptions for landmarks that were estimated to be more widely known among Hong Kongers. Americans, who were not familiar with Hong Kong culture, did not show this pattern of discriminative language use.

## Selection of Context-Appropriate Goals and Means

Individuals who have become proficient in navigating cultures are involved not only in choosing culturally appropriate tools, but also in selecting culturally appropriate goals in specific intercultural contexts. Leung et al. (2013, Study 2) measured how spontaneously individuals with different degrees of multicultural immersion spontaneously select context-appropriate goals and means in intercultural encounters.

In this study, the investigators asked Hong Kong Chinese and American undergraduates to estimate the motivation predilections of Chinese and American people. Hong Kong Chinese participants (who had rich experiences with both Chinese and American cultures) correctly estimated that Americans were more motivated by gains than were Chinese, whereas Americans (who did not have much experience with Chinese culture) incorrectly believed that Chinese were more motivated by gains than were Americans. Again, accuracy in estimation was evaluated by comparing the estimated responses (e.g., estimated preferences for promotion of gains among Americans) with the corresponding actual responses (e.g., actual preferences for promotion of gains among Americans).

When the investigators instructed the participants to persuade a Chinese or American friend to buy life insurance, the Hong Kong Chinese spontaneously applied their knowledge of cultural differences in motivation and generated more gain-focused arguments when their persuasive message was intended for an American friend than when it was intended for a Chinese friend. The American participants did not display such discriminative choice of goals and means and generated more gain-focused arguments for their Chinese friend than for their American friend

## Automaticity in the Choice of Context-Appropriate Cultural Tools

Experts in cultural navigation are able to make their contextualized judgments based on their intuition (vs. deliberation). There is evidence from a series of experiments (Fu, Chiu, Morris, & Young, 2007) that American Chinese college students, by virtue of their familiarity with both Chinese and American cultures, can automatically form cultural inferences from environmental cues. In this study, Chinese-American participants read sentences that referenced American culture (e.g., "Turkey and cranberries are traditional food for a holiday in November"), Chinese culture (e.g., "A great emperor once produced an underground army of clay warriors"), or culture-unrelated materials (e.g., "People usually watch movies, read books and sleep on long airplane journeys."). On each trial, one sentence was presented on the computer display. A quarter of a second later, a probe word was shown and the participants were asked to judge whether the probe was or was not in the sentence they just read. The probe word was in the presented sentence in some trials only. When the probe word was not in the presented sentences, it referred to either an American core value (freedom, diversity, and independence), or a Chinese core value (obedience, modesty, and conformity), or was unrelated to either culture (exercise, prosperity, and elegance). The participants made a judgment and their response time was recorded.

The analysis of interest was the time it took the participants to answer "no" when the probe word was not in the presented sentence. In these trials, when the probe word referred to an American value, response times were significantly

longer when the sentence referenced American culture than when it did Chinese culture or was culture-related. This happened because the participants spontaneously retrieved from memory their knowledge of American culture (including its core values) when they read a sentence that referenced American culture. Suppression of a cognitively accessible response (answering "no" to a cognitively accessible inference) had slowed down their response. This pattern of results was replicated in another study in which the participants were European Americans. These results suggest that immersion in European American culture is accompanied by spontaneous and intuitive responses to environmental cueing of cultural knowledge.

More importantly, among Chinese American participants, when the probe word referred to a Chinese value, response time was also significantly longer when the sentence referenced Chinese culture than when it did American culture or was not culture-related, suggesting that immersion in Chinese culture also strengthens spontaneous and intuitive responses to environmental cueing of Chinese cultural knowledge. European Americans, who were unfamiliar with Chinese culture, did not show this pattern of response.

## Combining Knowledge from Diverse Cultures to Enhance Creativity

A hallmark of cross-cultural expertise is that individuals have built the capacity to become an active agent of cultural transformation through creative combination of ideas and practices from different cultures. Often, people form new ideas by extending the conceptual boundaries of existing concepts, which is achievable by combining ideas from previously unconnected intellectual traditions (Wan & Chiu, 2002; Ward, Patterson, Sifonis, Dodds, & Saunders, 2002). An example is the creation of cultural neuroscience as a new field of study in psychology by combining ideas and practices in cultural psychology and cognitive neuroscience (Chiu, Kwan, & Liou, 2013). Individuals who are experts in navigating cultures have the capacity to use their knowledge of diverse cultures as intellectual resources, recombining knowledge from different cultures to create new knowledge. The hybrid cultures created in this way contribute to cultural transformations (Leung et al. 2008).

Consistent with this idea, a study has shown that Asian-Americans were creative in developing new dishes using a given set of ingredients when they were motivated to combine Asian and American cultures and when both Asian and American ingredients were available (Cheng, Sanchez-Burks, & Lee, 2012). In addition, there is clear research evidence that individuals with more opportunities to immerse in multiple cultures are more prepared to borrow ideas from foreign cultures in creative problem solving (Leung & Chiu, 2010). They also tend to generate a greater diversity of ideas as well more original ones in standardized measures of creativity (Cheng & Leung, 2013; Cheng, Leung, & Wu, 2011; Leung et al., 2008).

In short, there is clear evidence for the maxim of "practice makes perfect" in the domain of cross-cultural expertise development; individuals can develop cross-cultural expertise from cultural immersion. Those who have more opportunities to immerse in multiple cultures are able to develop accurate and contextualized representation of knowledge from different cultural sources, flexibly and discriminatively apply their contextualized cultural knowledge in the choice of situation-and culture-appropriate goals and means based on strong intuition rather than deliberation, and generate new knowledge by creatively recombining knowledge from different cultural traditions.

## Theoretical and Methodological Implications

Thus far, we have introduced the major ideas in an expertise approach to crosscultural competence. In the next section, we will discuss the implications of the expertise approach for the conceptualization and measurement of cross-cultural competence.

## Adjustment vs. Agentic Views

Much research inspired by the attribute approach has sought to show that attributes of cross-cultural competence predict adaptation or psychological adjustment to new or diverse cultures (Morris et al., 2014; Ruben, 1989). Adaptation and adjustment are also important criterion variables in the expertise approach (e.g., Li & Hong, 2001). However, the expertise approach also takes an agentic view of cross-cultural competence, positing that culturally competent individuals actively participate in and change cultures (Chiu & Hong, 2005). In the previous section, we reviewed how individuals with more opportunities for multicultural immersion combine intellectual resources from diverse cultures to create new ideas and products.

Inspired by these findings, some researchers (Keller, Wong, & Liou, 2012) have contended that culturally competent individuals can play an active role in cultural transformations. Examples of such individuals abound, including China's Sun Yat-sen and Deng Xiao-peng, India's Mahatma Gandhi, and Singapore's Lee Kuan Yew. These individuals acquired nuanced understanding of the political economies in foreign countries, and combined this knowledge with local cultural sensibilities and effected impactful changes in the political systems of their own countries. These individuals are not just adapting to foreign cultures. They are active agents of cultural transformation through their interpersonal relationships.

According to Keller et al. (2012), an adaptive cross-cultural competence development process begins with individuals possessing initial cultural knowledge and occupying an initial social network position in their culture. Through intercultural interactions, they learn about other cultures and reflect on their own cultural knowledge. As a consequence, they form new relationships with people from other cultures and learn how to adapt to intercultural encounters.

An agentic cross-cultural competence development process also begins with individuals possessing initial cultural knowledge and occupying an initial social network position in their culture. Through intercultural interactions, they learn about the distribution of knowledge in their own culture and foreign cultures. The acquired knowledge enables them to assume the role of a knowledge broker, and use their broker role for new knowledge creation through cultural knowledge recombination.

Cultural brokerage is a central concept in social network analysis. Knowledge sharing within a culture is efficient because of the presence of dense social relationships within the culture (Nonaka, 1994). However, transfer of knowledge across cultures is often difficult if not impossible because of the lack of ties between members of different cultures (Burt, 1992). Consequently, there are dissimilar stocks of knowledge residing in segregated cultures. A cultural broker is someone who has interpersonal ties with members of multiple cultures, and hence has access to knowledge from multiple cultures. This individual can facilitate knowledge flow between otherwise disconnected cultures.

People like immigrants and sojourners are in good position to play the cultural broker role, because they are already embedded in multiple cultures. However, successful role performance requires cross-cultural expertise. They need to be familiar with the distribution of knowledge in multiple cultures, including their own culture. They also need to possess the skills to flexibly and discriminatively choose context-appropriate tools in intercultural encounters.

Cultural brokers can perform their role through intermediation or match-making. Intermediation refers to the strategy of controlling the flow of information across contacts from segregated cultures by keeping their cultural contacts separate from each other. The broker mediates between the segregated contacts and is personally responsible for all the knowledge acquisition, recombination, and transfer processes. Match-making, in contrast, refers to the strategy of bringing previously segregated cultural contacts together, establishing relationship ties between members of the segregated cultures. A match-maker facilitates knowledge transfer and recombination by enabling direct communication between cultures.

This agentic view is underrepresented in the psychological literature of cross-cultural competence. Nonetheless, it connects seamlessly to the expertise approach to cross-cultural competence and offers a refreshing perspective on how individuals can actively shape their cultural environment to attain personal and collective goals.

## **Measuring Cross-Cultural Competence**

The attribute approach has provided the conceptual foundation for the development of many individual difference measures of cross-cultural competence, including the Intercultural Sensitivity Scale, the Intercultural Developmental Inventory, the Cross-Cultural Adaptability Inventory, the Intercultural Adjustment Potential Scale, and the Multicultural Personality Questionnaire (MPQ).

Matsumoto and Huang (2013) have provided a comprehensive review of these tests in terms of their usefulness in predicting adjustment and adaptability in cross-cultural settings. In this review, a test was favorably evaluated when its validation studies (a) had used reliable and valid measures of conceptually relevant criterion or outcome variables, (b) had included representative cross-cultural samples, (c) had used mixed methodologies, (d) had used a time-lagged design to establish temporal causality, and (e) had obtained evidence for incremental validity of the measure above and beyond what was already predicted by other related measures. Based on these criteria, the reviewers concluded that the Cultural Intelligence Scale, the Intercultural Adjustment Potential Scale, and the MPQ have the most promising evidence for measuring cross-cultural competence.

Nevertheless, some studies found that measures of conceptually distinct attributes are highly correlated. For example, Rushton and Irwing (2009) showed that a single factor accounted for 41% of the reliable variance on four of the five MPQ scales. Another study showed that the four subscales of cultural intelligence are highly correlated (Klafehn, Li, & Chiu, 2013). This raises the possibility that a general factor is sufficient to account for much reliable variance in self-reports of cross-cultural competence.

Given that most cross-cultural competence tests rely on self-reports of personal attributes, we cannot rule out the possibility that these tests measure self-efficacy in the cross-cultural domain instead of cross-cultural competence. Although some of these tests predict cross-cultural adjustment and performance, what underlies these predictive relationships may be cross-cultural self-efficacy. We need further studies to rule out this alternative explanation.

Furthermore, as Van Driel and Gabrenya (2013) noted, factors that determine performance do not constitute performance. To address this concern, we need to develop behavioral and performance measures of cross-cultural competence.

Perhaps the behavioral and performance tasks that have been used to assess the behavioral landmarks of cross-cultural expertise development reviewed above can be combined with self-report measures to study the joint effects of achieved cross-cultural expertise and the level of self-perceived cross-cultural competence. Do individuals display more competent cross-cultural behaviors and have better well-being when their positive self-perception matches their actual level of cross-cultural expertise (see Kim & Chiu, 2011; Kim, Chiu, & Zou, 2010)? Are those who exaggerate their cross-cultural competence in self-reports (self-enhancers) more

eager to engage in cross-cultural interactions? How do individuals with inaccurate self-appraisal of cross-cultural expertise calibrate their self-assessment and/or improve their expertise with repeated practice in cross-cultural interactions? These are interesting topics for future studies.

## Implications for the Development of Cross-Cultural Expertise

An important implication of the expertise approach to cross-cultural competence is that cross-cultural competence is learnable through cultural immersion. Cultural immersion begins with intercultural encounters and intercultural learning. However, not all intercultural encounters and intercultural learning are conducive to the development of cross-cultural expertise. Only those that support in-depth learning of cultures will lead to the construction of contextualized cultural knowledge and its flexible and creative use. Superficial contacts will not help individuals pass into higher stages of cross-cultural expertise.

Consistent with this idea, there is evidence that teaching cultural psychology could increase endorsement of cultural stereotypes if the students do not take the course seriously (Buchtel, 2014). Moreover, cultural immersion through academic exchanges and expatriate assignments is more likely to have creative benefits than do short-term foreign travels or sojourns (Maddux & Galinsky, 2009).

As mentioned earlier in this chapter, individuals who are novice in cross-cultural competence are likely to apply cultural stereotypes in intercultural interactions. Furthermore, superficial cultural learning may lead to socially undesirable behaviors. For example, broad foreign experiences that do not afford deep understanding of foreign cultures may strengthen endorsement of moral relativism—the belief that morality is relative rather than absolute. A strengthened belief in moral relativity will in turn justify and increase dishonest behavior (Lu et al., 2017). Thus, to develop individuals' cross-cultural expertise, it is important to provide opportunities for in-depth understanding of foreign cultures.

However, the mere presence of intercultural learning opportunities is not sufficient for development of cross-cultural expertise. What is also needed is the individuals' motivation to seek in-depth understanding of foreign cultures. Research has shown that people who are more open to experience benefit more from multicultural experience (Leung & Chiu, 2008). The preparedness to learn from foreign cultures also enhances the creative benefits of multicultural immersion (Maddux, Adam, & Galinsky, 2010). In contrast, individuals who are motivated to resist intercultural learning for ideological and other psychological reasons are not likely to benefit from intercultural learning opportunities (Chiu et al., 2013; see also Chiu & Hong, in press).

## Conclusion

Since Hammer et al. (1978) published their seminal paper on intercultural effectiveness, much research has attempted to identify and measure the personal attributes that predict effectiveness in intercultural interactions. In this chapter, we propose to extend the research on cross-cultural competence by conceptualizing it as a kind of expertise. This alternative conceptualization identifies the characteristic pattern of cultural information representation, application, and creation at different stages of expertise development, adds a new agentic perspective to the current adaptation view of cross-cultural competence, motivates a more balanced use of self-reports and behavioral measures of cross-cultural competence, and offers a theoretical lens to understand both the extent and depth of intercultural learning on the development of intercultural expertise. Hence, this expertise view has important implications for the teaching and training of cross-cultural competence. We hope the expertise approach to cross-cultural competence can supplement the existing attribute approach to offer a more complete understanding of this increasingly important human ability in a rapidly globalizing world.

#### Note

1 Argentina, Australia, Belgium, Brazil, Canada, Chile, China, France, Germany, Greece, Hong Kong, Hungary, India, Ireland, the Netherlands, Poland, Russia, Slovakia, South Africa, Spain, Turkey, the UK, and the USA.

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## Part II

# Culture, Psychological Science, and Research Methods

Western psychological research, especially research originating in North America, for many years presented its findings as natural fact, even when the studies included few, if any, participants from other cultures. The research also often had the additional limitations associated with homogeneity of race (participants were usually white), age (participants were often college and university undergraduates), and the tendency to treat "nature" (biological factors) and "nurture" (environmental factors) as ideas in opposition to one another. In Part II, we will explore some of the limitations of Western research, some of the reasons why researchers have not considered culture in their work, and some ways that research methods and statistical analysis can take culture into account.

Although all people share many fundamental characteristics, there is nevertheless an amazing diversity of people, not only across cultures around the world, but within such diverse countries as the United States and the United Kingdom. Thus, it becomes increasingly important that investigators make efforts to ensure that their research is more inclusive. Old assumptions about the universality of psychological principles are giving way to a more sophisticated understanding of the relation between universal and culture-specific truths.

Researchers studying the relation between psychology and culture face a variety of difficulties as they try to untangle and isolate the many facets and dimensions of culture that may influence behavior, and they must use care to avoid confusing cultural variables with others (such as socioeconomic status, population, density, age, education, and genetics) that may also be determinants of human activity. These efforts to improve research are critical to the ability of investigators to rule out non-cultural alternative hypotheses and to understand the interplay between culture and other characteristics like language and gender identity.

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The need for researchers to grasp the linguistic and cultural issues essential to development of fair and meaningful measures, and to recognize their own ideological and value-based biases are aspects of their work that set modern cultural scientists apart from their colleagues of a few generations ago. And further, what are the special ethical issues associated with cultural research? How can researchers maximize the generalizability of their findings? What do investigators do about populations that may be "hidden" by cultural repression or discrimination? How has evolution played a role in development of cultures? And how should behavioral scientists deal with the construct of race, which is often erroneously equated with culture? These are some of the issues we will encounter in Part II.

# Methodological and Conceptual Issues in Cross-Cultural Research

# Bernard C. Beins

Culture exerts a notable influence on virtually every aspect of one's behavior, thought, and attitude. Curiously, though, psychologists lost sight of this proposition for much of the twentieth century. This chapter will identify some of the issues that the current generation of psychologists has rediscovered as critical to researching and understanding the wide variety of human psychological experience.

Several issues merit attention here. First, psychologists will benefit by understanding the degree to which psychological responses reflect tendencies that are universal as opposed to particular to a given culture. Psychologists have concluded in some cases that they identified universals, but upon closer examination, the certainty has faded. And as more research emerges, universality appears all too chimeric.

Second, one's *Weltanschauung* clearly drives one's thought processes. Of specific attention has been a difference in perspective as a function of whether one's origins are within a collectivistic or individualistic culture. Again, what seemed to have been relatively clear distinctions have blurred as psychologists have moved from the level of culture to the level of the individual. A third important element in cultural research involves the very pattern of thought processes in people of different cultures. What is obvious and apparent to one is foreign to another.

Fourth, methodological issues per se have turned out to be of importance in understanding psychological processes. For example, neural imaging has revealed cultural effects on basic neural processes that one might assume are impervious to culture. Furthermore, on a larger level, how one categorizes participants from different cultures is a thorny issue that remains unresolved. Finally, ethical issues involved in research lurk in unexpected ways. What might be ethical according to one set of standards may not be in another.

Psychology has made notable progress, but as with any complex area, more questions remain than have been answered with certainty. In fact, as the research literature and concomitant knowledge accumulate, it becomes apparent that the issues become murkier as psychologists recognize the increasing number of factors that cloud the picture.

#### **Historical Elements**

Cross-cultural research in psychology is growing in scope and quantity, but it has had only a short history. Social researchers used to know that behaviors differed across cultures and that those behaviors were mediated by cultural factors. As Linton (1945) noted, "Personalities, cultures and societies are all configurations in which the patterning and organization of the whole are more important than any of the component parts" (p. 2). But for a number of decades, many psychologists forgot this fact. During the heyday of behaviorism, it seemed that there was little need to attend to culture for two important reasons.

First, animals did not have cultures, so researchers studying rats (which themselves were white) did not have to consider this construct. Second, if behaviors resulted from reinforcement contingencies, researchers may have reasoned that they needed only to understand reward and punishment, and culture would not have been particularly germane in many cases.

Even among users of projective tests like the Thematic Apperception Test (TAT), there was little focus on cultural background in responses. For instance, Riess, Schwartz, and Cottingham (1950) administered the TAT to Black and White participants and recorded the lengths of participants' responses; the results revealed that the length of utterances did not relate to race. This reliance on the quite objective and measurable number of words uttered was characteristic of the behavioral approach. Interestingly, the researchers did not attend to the content of those responses.

The lack of attention to culture belies the awareness by earlier psychological researchers and by anthropologists that studying culture was an intrinsic part of studying people. Current students of culture would undoubtedly disagree with some interpretations of differences, but the researchers recognized the importance of those differences. For example, Tylor (1889) attributed differences across cultures through the perspective of Herbert Spencer's model of cultural evolution, with Western "races" at the pinnacle. However, Thomas's (1937) ideas anticipated current thoughts about differences in culture leading to different behaviors; he did not accord different status to what others called the "higher" and "lower" races.

By the 1930s, some psychologists had adopted a tone that resembles today's. For example, Herskovits (1935) dismissed the notion that African cultures (of which there were many) were primitive or savage. Rather, he noted that strong

family ties, strong adherence to governmental and legal principles, and established religions characterized African cultures of that era. He also distinguished the cultures of Black people in Africa and North America, noting that cultures change as people from one culture come into contact with people from another.

Revisions in ideas about people of non-Western or of southern and eastern European descent in the 1930s seem to have resulted from the influx of a new type of psychologist. Psychology became populated with people from a wide range of ethnicities, particularly Jewish psychologists, who may have been more sensitized to the different life experiences of minorities, and were therefore more aware of the cultural factors that eventuate in particular behaviors (Samelson, 1978).

The current focus in psychology on the importance of culture in affecting behavior may similarly result from the influx of a different set of ethnic minorities. Between 1996 and 2004, there was an increase in doctoral degrees among American minorities of 16.6%, an increase in master's level degrees of 90.8%, and an increase in bachelor's degrees of 36% (American Psychological Association, 2008) and in a similar span of time an increase of over 28% in minority student affiliates (American Psychological Association, n.d.). In addition, as an organization, the American Psychological Association (APA) has focused on the internationalization of the discipline, as evidenced by its 2008 Education Leadership Conference that focused on international connections in psychology.

The current cultural climate in psychology will pave the way for changes in two important aspects of research: (a) the way psychologists conduct their research, and (b) the way they interpret their results. Just as understanding the relation between culture and behavior is complex, so must be the way psychologists develop research questions, identify appropriate methodologies, and interpret their data.

#### **Universals and Measurements Across Cultures**

Cross-cultural research poses difficulties that much other research may not face because, in addition to developing designs that show high levels of internal validity, cross-cultural psychologists have to worry about appropriate external validity. There are also practical issues of generating appropriate participant samples from varied cultures. Furthermore, drawing inferences from data can be difficult because the researchers need to understand the intricacies of each culture. Attention to cross-cultural research is relatively new in psychology; thus, the methodological and interpretive issues still merit critical scrutiny.

An important component of both internal and external validity is the nature of measurements across cultures. Such measurements across cultures may not be comparable because of factors such as translation issues, failure of items being measured to capture the same construct across cultures, different response styles, and social desirability (Chen, 2008).

Compounding this dilemma is the fact that some apparently etic traits have emic components in a particular culture that may be irrelevant in another. For instance, in Chinese culture, the etic construct of dependability includes emic components like being gracious to others, truthful, and family-oriented (Cheung & Leung, 1998).

Even with such differences, some cross-cultural investigations of universal processes have attained the status of "classic" research. For instance, Ekman's (2007) research on recognition of facial expressions of emotions and his (2003) suggestion that each emotion should involve a specific and stable neural circuit provides an appropriate backdrop with which to begin a discussion of how questions evolve across the various phases of culturally-oriented research. Ekman reported that respondents from the United States, Chile, Brazil, Argentina, and Japan all identified the emotions at well above chance levels, implying that a display of emotion has a universality that transcends individual cultures.

However, Elfenbein and Ambady (2003) pointed out that cultural factors are not irrelevant to the recognition of emotion. For example, recognition of emotion within one's own cultural group exceeds recognition by those of other cultures. Further, even though there may be consistently high recognition of emotions in photographs, the accuracy rate is affected by how many generations a family may have lived in a given culture. In remote societies, happiness may be recognized with modest success, but other emotions (i.e., sadness, anger, fear, and disgust) show low rates of correct recognition (Crivelli, Jarillo, Russell, & Fernández-Dols, 2016a; Crivelli, Russell, Jarillo, & Fernández-Dols, 2017).

The research in this area depicts a more complex set of processes involved in understanding recognition of emotions than initially envisioned. Starting at the neural level, recent research has shown that the singular neural circuitry for a given emotion that Ekman posited does not capture the complexity of the process. If emotion involved generally independent neural circuits, one would expect that a given emotion, such as fear, would activate some brain structure more than other emotions would and that the emotion would show stability across situations. Neither of these patterns emerge in imaging research (Derntl et al., 2012; Wilson-Mendenhall, Barrett, Simmons, & Barsalou, 2011).

In addition, growing evidence shows that culture modulates both the way people process emotional cues and the way people express emotions. For example, the pastoral Himba of Namibia assign emotion to specific events (e.g., the death of a loved one) rather than to a generalized state (Gendron, Roberson, van der Vyver, & Barrett, 2014), and Trobrianders of New Guinea may include social motives in determinations of facial expression (Crivelli, Russell, Jarillo, & Fernández-Dols, 2016b). The type and intensity of smiles also show a cultural component (Niedenthal, Rychlowska, & Wood, 2017).

Emotions like anger and fear are not singular states, particularly given the evidence that central and peripheral measures do not provide evidence of independent states; rather, situations may exert pronounced effects on measurements rather than centralized emotions per se. Gendron has also suggested that the current body of research should clue psychologists regarding future work. She maintains

that (a) cues to emotions informing emotion perception merit study, (b) investigators should query the attributions spontaneously occurring across cultures, and (c) cultural research should reflect a more theoretical underpinning (Gendron, 2017; Gendron et al., 2014).

Similarly, John Bowlby's conceptualization and Mary Ainsworth's research on attachment are predicated on the universality of the construct. Ainsworth's findings seem descriptively useful, but some (e.g., Keller, 2008) have argued that the conclusions regarding differences in attachment styles across cultures represent a bias toward Western culture.

For instance, investigators have used children's drawings to assess their degree of secure and insecure attachment. In comparisons of children from Berlin, Germany, and the district of Kumbo, Cameroon, the German children appeared to show significant secure attachment whereas the Cameroonian children showed insecure attachment. A closer examination of the social and development dynamics of the groups revealed that such a conclusion was unwarranted (Gernhardt, Keller, & Rübeling, 2016).

Keller has stated that some conclusions, in addition to being misleading, include a heavy dose of judgment. For example, she suggested that inferences about maternal sensitivity associated with attachment reflect "a judgment on maternal adequacy, a way of distinguishing good from bad mothers" (p. 410). Further, the paradigm is associated with models based on traditional Western family structures and, it has been argued, is unscientific in its evaluation of one tradition of development by the principles and standards of another. Hence, she maintains, attention to different developmental pathways is a moral obligation (Keller, 2016, 2017a, 2017b).

An assessment of the research findings and subsequent interpretations suggests that attachment behaviors deemed undesirable or even pathological in one culture may be desirable and entirely acceptable in another (Rothbaum, Weisz, Pott, Kiyake, & Morelli, 2000). Thus, one could convincingly argue that attachment theory, often regarded as culture-free, is highly culture-bound.

Psychologists have regarded recognition of emotion and attachment styles as universal. Thus, one might conclude that these topics should be easy to research: It would not matter where one conducted the research because people would not differ notably across different cultures. Unfortunately, current research on these topics belies the idea that cultural specifics are irrelevant. Consideration of attachment and of recognition of emotion reveals the difficulty that researchers face in trying to study constructs that may have some degree of universality.

A further indication of the complexity of these issues is that constructs that may be regarded as similar may require very different cultural assessment. For example, Smith, Spillane, & Annus (2006) have argued that anorexia nervosa is culturally invariant but that bulimia nervosa is highly Western in origin and prevalence. In a different category, psychopathy, it appears that the structure of characteristics of psychopaths differs across cultures (Dutch and American) that one might assume are reasonably similar, being industrialized, Western nations (Verschuere et al., 2018).

# Issues in Culturally Relevant Research: Individualism and Collectivism

Psychologists have developed an awareness that they need to exercise caution in discussing supposedly universal traits or patterns of behavior. Even apparently simple cognitive acts like categorizing stimuli or remembering details of an experience involve important cultural components. For instance, Chinese participants may group words according to how they relate, whereas American participants group them according to taxonomy (e.g., in a *monkey-banana-panda* triad, Chinese participants group *monkey-banana*, but Americans pair *monkey-panda*; Ji, Zhang, & Nisbett, 2004).

Considerations of complex personality issues raise even more difficulties. For example, researchers have assumed that the need for self-esteem is a universal trait because the well-established body of literature has consistently shown such a need. However, that literature is based on North American culture; when psychologists have investigated self-esteem among the Japanese, the results diverge in critical ways from those involving North American participants (Heine, Lehman, Markus, & Kitayama, 1999). In fact, self-esteem as conceptualized in Western psychology may be fairly irrelevant in Eastern psychology.

Given that psychological theory is typically Western-based, the constructs that psychologists use and even the language used may make it difficult to understand cultural differences and even to speak about them. Thus, researchers may be discussing what they think are etics that are really emics. In fact, there is still disagreement as to whether some psychological constructs are basically universal with different cultural manifestations or whether they are largely cultural (Smith et al., 2006).

One of the dimensions receiving considerable attention because of its cultural relevance is individualism–collectivism. According to Matsumoto and Yoo (2006), this is the most widely studied dimension in the field, and varied research projects have illustrated consistent behavioral differences associated with the individualistic-collectivistic (IC) continuum. It will serve as a useful illustration of the nature of the problems associated with studying behaviors across cultures.

An initial caveat in discussing the effects of one's location on the IC continuum is that one must recognize that attributing differences in behavior to IC orientation is difficult because the investigator must be able to separate effects of culture (e.g., IC orientation) from other sources of variability. On an ecological level, there are myriad factors that affect behavior in different countries, including affluence, population density, religious practice, and climate. As psychologists define *culture*, these ecological variables may stand apart from cultural variables (Matsumoto & Yoo, 2006, p. 237).

Research on individualism and collectivism has revealed that people from collectivist cultures remember events differently from people from individualistic cultures. Individualist people tend to remember situations from the viewpoint of

themselves as part of the situation. On the other hand, collectivist people tend to focus on the social situation with the perspective of an outsider looking in. A typical interpretation is that individualists focus on self and collectivists focus on the other. If this difference in memory is true, then simple measurement of memories may be problematic across cultures because of the different ways that people conceptualize their world (Cohen & Gunz, 2002).

However, even if one were to resolve this dilemma and others like it, another problem arises in cultural research. Multiple cultures may exist and notable individual differences appear *within* a given country; unfortunately, researchers often equate country with culture, making the assumption that what is true generally within a country reflects differences in culture compared to another country. Thus, Iwata and Higuchi (2000) studied state and trait anxiety, finding that their Japanese participants had less positive views of themselves and higher levels of both state and trait anxiety than Americans. They attributed the variation across countries to differences in Japan and the United States on the IC continuum. But, as Matsumoto and Yoo (2006) pointed out, Iwata and Higuchi interpreted their data under the assumption that Japan is a collectivist society in which people are compliant in order to maintain social harmony and underestimate their own positive traits.

Matsumoto and Yoo identified seven assumptions that Iwata and Higuchi made regarding Japanese people. None of these assumptions were empirically tested. Matsumoto and Yoo did point out that Iwata and Higuchi's assumptions may be correct and that differences between Japanese and American students may have resulted from the relevant differences on the IC continuum. Their point was that psychologists should engage in research to verify such assumptions. The attribution of differences across groups to cultural factors when there is no empirical support for such an interpretation is known as the *cultural attribution fallacy*, a specific case of a larger problem that Campbell (1961) called the ecological fallacy.

The IC continuum and the related independent-interdependent continuum have become a staple of research on cross-cultural issues. In some cases, however, their utility can be limited. For example, Vignoles et al. (2016) investigated the concept of the self as independent versus interdependent across multiple groups and found limited support for the dichotomy in characterizing people's conceptions of the self. Instead, they developed a 7-factor model of self-construal, reflecting the obviously complex construct.

The complexity of characterizing the self (and other concepts) is further clouded by the question of what attitudinal measures actually capture. Kitayama (2002) correctly pointed out that responses on attitudinal surveys may not represent actual behavior and thought because the responses may not tap into processes that go largely unnoticed, even when leading to an overt behavior or thought.

Interestingly, Iwata and Higuchi (2000) couched their discussion of the Japanese-American differences using the American pattern as the norm. This type of inference poses behaviors of Americans as a standard against which others are compared—a practice which Arnett (2008) has pointed out is common in

discussing and interpreting research findings. This orientation to interpretation of research holds true for other types of comparisons as well, including gender differences (Hegarty & Buechel, 2006).

Another complicating factor here is that the IC dimension, as dominant as it is in cultural research, may not be the only construct with explanatory power. For example, as Matsumoto and Yoo (2006) pointed out, psychologists have listed 25 additional dimensions that distinguish cultures. And, as they noted, countries that differ on one dimension may also differ on others. For instance, on the IC continuum, the United States stands at first in individualism, whereas Japan is 27th out of 70 countries (which puts both Japan and the United States below the median in collectivist tendencies). At the same time, Japan is 8th in uncertainty avoidance, whereas the United States is 59th (Hofstede, 2001). Matsumoto and Yoo also noted that Japan ranks 4th in long- versus short-term orientation, with the United States at 26th out of 36 countries. Either uncertainty avoidance or long-term/short-term orientation might explain anxiety level differences between Japanese and Americans (Iwata & Higuchi, 2000) as well as or better than IC.

Finally, researchers must provide empirical assessment of characteristics of people in a particular culture in order to draw inferences about behaviors based on perceived differences across countries. Noting the great within-group variability in traits within a culture and, often, small across-group differences, McCrae and Terracciano (2006) concluded that "there does not appear to be even a kernel of truth in the stereotypes of national character" (p. 160). There may be consensus about people in a given culture (e.g., the belief by Americans that the English have no sense of humor), but McCrae and Terracciano note that consensus (i.e., reliability) does not equal validity. Hence, valid measurements of traits in a sample must accompany inferences of behaviors based on those traits.

# Culture and Its Relation to Thought and Language

The discussion above centers on the role of culture in attitudes, behaviors, and personality. But there is reason to believe that culture may affect the way people actually think about the world. The belief that Inuit people have a multitude of words for snow and that this linguistic abundance leads them to conceptualize their snow-filled world differently than people in moderate climates is just a myth. But the point behind that myth has a reality. One's cultural background, including one's language, seems to be causal in the development of a world view.

For example, as noted previously, Ji et al. (2004) presented their participants with word triads such as *monkey-panda-banana*. Participants selected two items that formed a group. A grouping like *monkey-panda* is categorical, whereas a grouping like *monkey-banana* is relational. The question that the researchers addressed was

whether people of Chinese background and of American backgrounds responded similarly. The results confirmed that the Chinese participants were more likely to choose relational pairings (e.g., monkey-banana because monkeys eat bananas), whereas the American participants favored categorical pairings (e.g., monkey-panda because both are animals).

These results support the notion that people of East Asian backgrounds preferentially focus on overall context but that those with Western backgrounds make use of taxonomic concepts. Such findings are compatible with a collectivist, context-oriented perspective versus an individualistic perspective. Such sensitivity to context has appeared in numerous studies, including accuracy in identifying one's orientation in a rod-and-frame test (Ji, Peng, & Nisbett, 2000) and memory for focal versus background elements in visual display (Masuda & Nisbett, 2001).

Unfortunately, explanations of complex processes are always fraught with rival hypotheses. Simply because Ji et al.'s (2004) participants may have differed on the IC continuum, it does not necessarily follow that the differences in their patterns of responses in choosing a pair of words from the triad were due to collectivism versus individualism. Even as such research has become part of the discussion of differences between independent and interdependent or individualistic and collectivistic groups, it is not entirely clear how robust the findings may be. In a registered replication of the research showing holistic attention to visual stimuli among collectivistic individuals and analytic attention on the part of individualistic individuals, the results were inconsistent with the original research (Hakim, Simons, Zhao, & Wan, 2017). Beyond this failure to replicate, the problem with using individual data to characterize national culture and, conversely, applying national data to individual behavior is that the ecological fallacy can be problematic.

Drawing such a conclusion may reflect an example of the cultural attribution fallacy. For example, Matsumoto and Yoo (2006) have speculated that differences in memory for individual items in a visual display between Japanese and American participants may as well be due either to the greater emphasis on rote memorization in schools or on the visual computer game culture in Japan. Such memorial differences may be consistent across cultures, but those differences do not always signal cultural differences (as the term *culture* is used by psychologists). This difficulty with interpretations lies at the heart of the interpretation paradox (Van de Vijver & Leung, 2000), which reflects the fact that large differences across groups are easy to spot, but hard to explain, whereas small differences are hard to spot, but easy to explain.

Similarly, differences in responses to stimuli may reflect a combination of culture and other factors. As noted above, Ji et al. (2004) reported that Chinese participants organized words relationally but Americans organized words categorically. At the same time, the language in which participants were tested affected their responses. Response patterns of some Chinese participants differed when the language of the experimental session was Chinese as opposed to English. This finding corresponds to differences that other investigators have noted. For instance,

Marian and Neisser (2000) found that language itself provides a context for recall. When Russian-English bilinguals received a prompt in Russian, their memories for autobiographical details were associated with living in Russia, whereas English prompts spurred better memory for events associated with speaking English. In addition, the researchers have noted differences in cognitive processes associated with language itself.

Similarly, cross-cultural research has revealed differences in recognition of emotions. Matsumoto, Anguas-Wong, and Martinez (2008) discovered that Spanish-English bilinguals recognized facial emotions more accurately when they were tested in English than in Spanish, and Matsumoto and Assar (1992) showed that Hindi-English bilinguals recognized facial emotions more accurately when tested in English than in Hindi. These results based on language may extend beyond language itself. That is, it is possible that bilinguals who are bicultural engage in a kind of cultural frame switching, viewing their world in different ways depending on the context.

For example, Benet-Martínez, Leu, Lee, and Morris (2002) assessed the degree to which participants saw their two cultures as being consistent with or contradictory to one another. They characterized the participants as either high in bicultural identity integration (BII, cultures were consistent) or low in BII (cultures were contradictory). The researchers primed participants to think either of American culture (e.g., by presenting pictures of Mickey Mouse, the U.S. Capitol, etc.) or Chinese culture (e.g., by presenting pictures of a rice farmer, the Great Wall of China, etc.). Participants subsequently viewed an animation of a single fish swimming in front of a school of fish, and then the participants gave an explanation as to why the single fish was leading the pack. The researchers coded the responses as involving factors that were either internal (personal characteristics of the fish) or external (the fish being influenced by other fish).

The results revealed that people who saw their two cultures as consistent with one another (those high in BII) responded with internal attributes of the fish when primed with American symbols and with external attributes when primed with Chinese symbols. On the other hand, participants who saw their two cultures as contradictory (those low in BII) showed internal attributions when primed with Chinese symbols and external attributions when primed with American symbols.

The researchers concluded that those high in BII readily engaged in cultural frame switching because they were comfortable with both worldviews. In contrast, those low in BII reacted to cues in one culture by drawing to mind their affiliation with the other culture. This response resembles the behavior of tourists to foreign countries who have a heightened awareness of their affiliation with their culture but who rarely think of that affiliation in their home country. As Markus (2008) pointed out, ethnicity can affect the psychological experience even when people are not aware of it.

As these results show, culture plays a significant role in how people observe and respond to the world around them. But the issue is complex because behaviors

change due to individual differences like the language that the person uses and the degree to which the person feels assimilated into the various cultures to which he or she is exposed in research. Depending on the sample and how participants are primed, results might show vastly different patterns. For example, Shih, Pittinsky, and Ambady (1999) primed women of Asian descent to their gender identities or to their cultural identities before asking them to solve math problems. When the women received the gender prime, they performed less well on the math task than when they received the culture prime. Inzlicht and Ben-Zeev (2000) provided an example of what may be a very subtle prime that had a major effect on women's math performance. Simply being in the presence of men depressed women's math performance compared to being in a single-sex research session.

Priming is a useful technique for assessing the effect of group membership. Much of the work on performance after a prime as it systematically affects different groups has involved sex and gender (e.g., Inzlicht & Ben-Zeev, 2000); it is well known, but less studied, in the context of race (e.g., Aronson et al., 1999; Steele & Aronson, 1995). There is a collection of additional research on other cultural groups whose members are affected by appropriate primes, including Canadian (Walsh, Hickey, & Duffy, 1999), Chinese (Lee & Ottari, 1995), French (Croizet & Claire, 1998), German (Keller, 2007), Italian (Muzzatti & Agnoli, 2007), and poor people (Croizet & Claire, 1998).

This complex pattern of factors that influence one's outlook and behavior reveals the caution required in attributing differences in performance simply to culture. Culture might be very important, but differences in behavior may reflect the moderating effect of other variables and of individual differences among participants. Thus, differences across groups might actually reflect a confounding variable that is correlated with cultural affiliation but the differences may not be due to that affiliation itself.

For example, with advances in genomic research, it should be possible to use genetic information to understand the emergence of disease and psychological disorder, but investigators often cling to the use of race as their explanatory construct. In biomedical and other applied areas, some scientists have recommended that research reports include information about the racial/ethnic/sociocultural characteristics of participants but not to use such information to create variables for statistical analysis (Batai & Kittles, 2013; Shields et al., 2005). According to some scientists, "genetics can provide some information about ancestry, but ancestry may or may not correlate well with a person's race" (Ossorio & Duster, 2005, p. 126). And if we are in a postgenomic world, we need to consider epigenetics and experience, further clouding the discussion (Meloni, 2017). In addition, for various reasons, racial categories in use now differ from those of a decade ago (Harris, Ravert, & Sullivan, 2017). Such socially determined categories persist even among geneticists, who rely on categorizations used by scientists with whom they collaborate. Such racial identification, based largely on political and geographical factors,

allows descriptive specificity, but at the cost of conceptual coherence (Panofsky & Bliss, 2017). The definitions of who fits into what category present a picture of complexity and confusion.

The Council of National Psychological Associations for the Advancement of Ethnic Minority Interests (2000) has developed guidelines for research in ethnic minority communities in the U.S. These guidelines were developed in the context of American culture, but they pertain to cross-cultural research of any kind. The principles involve (a) avoidance of treating all members of a group as the same; (b) development of cultural competence by researchers; (c) use of multiple, valid, convergent measurements; (d) understanding of cultural context; (e) use of representative samples; and (f) avoidance of using race as a predictive construct.

# **Methodological Issues**

The cognitive and intellectual effects of culture on thought and behavior pose serious issues in interpretations of research results. But methodological questions that appear fairly simple in research with samples from a single culture turn out to be complicated in and of themselves. Failure to account for the effects of methodology across cultures can result in data that are at best uninterpretable or, at worst, entirely misleading. The present discussion of cross-cultural research will include a broad definition of *cross-cultural*, accepting that different cultures can exist across countries but also within countries.

In describing their research, authors should provide enough demographic information about participants (a) to allow valid interpretation of results; (b) to generalize the results; and (c) to provide useful information for further research in the area (American Psychological Association, 2010, pp. 29–30). This information includes variables like age, race or ethnicity, sex, and socioeconomic status. As noted below, race and ethnicity are not useful explanatory constructs, but when demographic information appears in a published article, readers can use that information to put the results into context regarding to what groups the results might pertain.

A cursory examination of most research reports reveals a paucity of such information. Interestingly, the third edition of APA's publication manual (American Psychological Association, 1983) did not mention the importance of including culturally relevant information about participants. Not until the fourth edition did the manual provide detailed guidance about describing cultural characteristics of participants (American Psychological Association, 1994). This change across the publication manuals mirrors the increase in attention to the importance of culture in research.

The importance of these variables in behavior is obvious. But there are also potential surprises lurking where researchers are not likely to expect them. For example, the results of brain imaging studies show that culture and even age are

associated with differences in neural processing (Apanovich, Bezdenezhnykh, Sams, Jääskeläinen, & Alexandrov, 2018; Park & Gutchess, 2006; Wang, 2016). Further, some psychologists have suggested that culture is "embrained" and that associated neural changes require no overt cognitive processing (Kitayama & Uskul, 2011). Consequently, failure to recognize such cultural effects could blind researchers to confounding variables and problems in drawing inferences; failure to indicate both age and ethnicity in a research report could hamper further research in the area.

Furthermore, some psychologists have questioned whether culturally relevant research involving race (as opposed to ethnicity) is well grounded. That is, does race actually represent a "naturally occurring" causal variable? Helms, Jernigan, and Mascher (2005) noted the methodological problems associated with conceptualizing people from a given racial category as, an intact group. As a rule, researchers do not use empirical measures to verify that the members in a group actually share important characteristics other than race (Phinney, 1996).

Even when investigators report demographics, one needs to be aware of potential problems with this information. When people self-report their race, they may alter their choices depending on type of question or perceived advantage of a given identification in a particular situation (Panter, Daye, Allen, Deo, & Wightman, 2009; Phinney, 1996). Thus, even if race is a viable conceptual variable, assignment to racial categories, whether by the researchers or by the participants, may be problematic.

Another, related problem with categorizing by race or ethnicity is that such categories are often based on bureaucratic rather than on systematic and scientific denotations. Rodriguez (2000) pointed out that, if a researcher uses categories established by the U.S. government, the same individual may fall into different groups depending on what agency has collected the data. The Census Bureau does not include *Hispanic* as a racial category, but agencies responsible for civil rights issues do include such a racial category.

The Pew Research Center has illustrated the problem with categorization with a "quick primer" related to being Hispanic, at least in the eyes of the U.S. Census Bureau:

- Q. I immigrated to Phoenix from Mexico. Am I Hispanic? You are if you say so.
- Q. My parents moved to New York from Puerto Rico. Am I Hispanic? You are if you say so.
- Q. My grandparents were born in Spain but I grew up in California. Am I Hispanic? You are if you say so.
- Q. I was born in Maryland and married an immigrant from El Salvador. Am I Hispanic? You are if you say so.
- Q. I was born in Argentina but grew up in Texas. I don't consider myself Hispanic. Does the Census count me as an Hispanic? Not if you say you aren't. (Passel & Taylor, 2009)

With research involving comparisons across countries, the situation is equally or even more murky. Researchers have often equated country and culture, so that all participants from a given country are seen as having the same cultural roots. Chang (2000) provided an example of the drawback in this approach, explaining that there is really no single cultural group that one can designate as Chinese. Considering historic, linguistic, and anthropological factors, one could identify over 50 different ethnic groups that are all labeled Chinese. In fact, some of these groups speak variants of Chinese that would be mutually incomprehensible. Some researchers have used strategies like labeling as Asian anybody who was born in Asia, which could include people from a vast array of countries that show notable cultural differences among themselves (Cohen & Gunz, 2002; Kim, Atkinson, & Yang, 1999).

Further difficulties arise in interpreting data based on cultural category. Kim et al. (1999) suggested that as people from Asian countries become familiar with the culture in the U.S., their behaviors may change quickly. However, their attitudes may change slowly, if at all. So in one sense, they become members of both cultures, with an outlook dependent on the degree to which they feel comfortable in both cultures (Benet-Martínez et al., 2002).

#### **Stimulus and Measurement Materials**

Likert-type scales are ubiquitous in psychological research, and the results they produce are seldom seen as contentious, in spite of evidence that there are significant cultural issues that lurk unseen. For example, Asian (broadly conceived), Australian, Greek, Italian, and Spanish samples show moderate response styles on such scales, whereas American, French, German, and British samples show more extreme response styles. Not surprisingly, different response styles occur among varied cultural groups within the same country. Such dynamics vary in countries differing on the individualism/collectivism continuum, but little attention has been paid to whether an individual's place on the continuum predicts response style. Statistical maneuvers can remedy some of these effects, but at the cost of potentially disguising real differences across groups (Ares, 2018).

A further, significant issue in cross-cultural research involves the materials (e.g., psychological tests, experimental stimuli) that investigators use. These materials might seem straightforward and noncontroversial within the context of single-culture research, but there are notable reasons to attend to them in cross-cultural research.

Researchers who measure a construct across different groups often assume that the measurement is invariant across groups (Chen, 2008). A second assumption is that the construct itself is the same across the groups (Arnett, 2008; Heine & Buchtel, 2009). Neither of these assumptions is guaranteed. For instance, Chen has pointed out lack of measurement invariance in educational measurements across high- and low-performing groups. So reliability (and hence validity) are generally

lower in measuring underperforming groups. Furthermore, across groups, different factors may underlie a construct like self-esteem (Smith et al., 2006) or personality disorders (Ryder, Sun, Dere, & Fung, 2014), so measuring the construct comparably in the different cultures is difficult or maybe not even possible.

When it is possible to assess personality across cultures that are related (e.g., American and European), language and stimulus issues can still be important. Studies of the Big Five model of personality lead to somewhat different results as a function of translating English words into other European languages (Peabody & De Raad, 2002). Similarly, the addition of contextual or situational information in self-reports of personal characteristics can affect the reliability of the measurements of the Big Five traits (De Raad, Sullot, & Barelds, 2008).

In addition to the problem of characterizing a construct, if a measurement instrument is to be used in groups with different languages, translation issues arise. The concept of *feeling blue* has been used to exemplify linguistic concerns. A direct translation into Chinese or Spanish produces an item with little meaning (Chen, 2008; Rogler, 1999).

In consumer research, equating the English words *crispy* and *crunchy* with their supposedly comparable German words *knackig* and *knusprig* turns out to be problematic. Even within the same language, Spanish, the words *crujiente* (*crispy*) and *crocante* (*crunchy*) have different meanings in Spain and Uruguay (Ares, 2018).

The use of back translation can help (Banville, Desrosiers, & Genet-Volet, 2000), although there are still reasons for concern when researchers attempt this. For example, Rogler reported that 36% of test items on the Spanish version of the Clinical Analysis Questionnaire had grammatical errors or direct translation of idioms that made no sense in Spanish.

In some cases, the evidence suggests cross-cultural utility of measurements; for instance, the Revised Child Anxiety and Depression Scale appears to show cross-cultural validity (Stevanovic et al., 2017); but other widely used measures, such as the Harvard Trauma Questionnaire do not (Rasmussen, Verkuilen, Ho, & Fan, 2015). To further complicate matters, an instrument may show conceptual equivalence of constructs across cultures, when the scores on a test may not be comparable (Holding et al., 2018).

There is a growing literature regarding the validity across cultures of assessment materials and the constructs they measure, but the issue is far from settled. The question of cultural appropriateness on many levels in research remains an important concern.

#### **Ethics**

A final set of issues in cross-cultural research revolves around ethics in research. In the present context, these issues are not associated with anonymity, confidentiality, informed consent, and other elements of planning and conducting research, although researchers must attend to them. Rather, the discussion here involves the implications of research with diverse populations.

Markus (2008) raised the question of whether research on race and ethnicity, in and of itself, leads to stereotyping or other ethically troublesome outcomes. The question is not moot. For example, Kirmayer and Young (1998) reported that somatization of psychiatric symptoms varies across cultures. In addition, some behaviors that are stereotypically associated with certain ethnic groups in the United States are also associated with personality disorders (Iwamasa, Larrabee, & Merritt, 2000). And Keller (2008) has asserted that attention to different developmental pathways in studies of attachment across cultures has moral implications. Researchers who are not sensitive to cultural variations could draw inferences that result in stigmatization and generally unwarranted conclusions. APA's ethical principles and standards are especially relevant here.

First, among the aspirational general principles cited by APA (American Psychological Association 2002), the issue of justice is quite relevant here. That is, psychologists need to recognize the limitations to their expertise and competence and to recognize their biases.

Second, psychologists must respect people's rights and dignity. This principle pertains to recognition of and respect for individual differences associated with "age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, and socioeconomic status" (p. 1063). Furthermore, psychologists are enjoined to consider these factors when working with members of such groups.

Within the enforceable ethical standards set forth by APA, there are several specific elements related to culturally relevant research, including Competence (boundaries and maintenance of competence, bases for scientific judgments) and Assessments (use of assessments, interpreting assessment results, assessment by unqualified persons).

Researchers should not ignore the fact that research on populations with which they are unfamiliar is fraught with potential conceptual and methodological problems. The conclusions based on research with participants from diverse backgrounds have both theoretical and social implications that are connected to ethical issues.

## Conclusion

Cross-cultural psychological research has moved through several stages over the past century, from a relatively simple, descriptive depiction of people in varied cultures to a complex and nuanced recognition of the complex interplay between culture and behavior. The recent impetus among many psychologists to consider the relation of culture and behavior seems to mirror society's increased interest in

cultural issues as American society has become more diverse; along the way ethnicity has become a more prominent facet of many people's lives.

Kim (2007) has suggested that, just as societal ideas change, so do research ideas, positing that there are four "cultures" of cultural research. These so-called cultures include (a) the pre-encounter research culture: "I'm not interested"; (b) the initial encounter: "culture is a nuisance"; (c) the Captain Cook research culture: "let's explore and compare"; and (d) the paradigm shift research culture: "beyond ethnocentric paradigms." One might argue that psychology has entered the exploration/comparison phase. Development of ideas that may move psychological theory beyond ethnocentric paradigms would require a paradigm shift, according to Kim. Therefore, it is not immediately clear what the next phase would look like.

However, within the current paradigm, psychologists are only now successfully separating some culture-independent and culture-dependent processes. It has become apparent that some supposedly universal processes are more intertwined with specifics of language than initially supposed, as shown in the research on the Big Five model of personality (Peabody & De Raad, 2002).

Furthermore, the use of an American-centered model of psychological processes still predominates. Models of attitude, personality, and behavior may undergo additional modification when what is considered standard (i.e., the American perspective) instead becomes simply one of many useful perspectives. And as researchers compare and explore psychological processes across cultures, it will be critical to define samples precisely and to document the validity of assumptions that participants show certain cultural characteristics, a practice that is largely honored in the breach.

Finally, because issues of race and ethnicity carry considerable emotional valence, researchers must show awareness of the implications of their findings. Obviously, all researchers need to show such awareness, but problems with stereotyping, prejudice, or simple misunderstanding are largely irrelevant in monocultural research with participants of the dominant culture.

Breaking new ground in any area of research poses distinct challenges. Cross-cultural research is no different than any other area. As noted here, psychologists have identified problems and posed solutions to a constellation of new issues with which researchers must contend when expanding the horizons of psychology to include the study and understanding of behavior across cultures.

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# The Inextricable Link Between Culture and Statistics

# Susan A. Nolan and Andrew F. Simon

Across all the disciplines within psychology, statistics might be one of the last that people would associate with culture. Yet, statistics is essential to understanding culture in more objective, nuanced ways. And culture can provide a lens through which we can often better understand complicated statistical topics. Why are these topics so intertwined?

First, each one of us perceives the world through our own cultural background. We are all inherently biased. Statistics can help us to be more objective in the face of our own culturally based experiences and biases. By helping us to pinpoint some of our own misconceptions, we can start to understand the forces, including culture, that shape our biased perceptions of the world in the first place.

Second, many of us are naturally intrigued by cultural differences and similarities. Although some of us are also inherently fascinated by statistics, many of us are, well, less than fascinated—at least at first. Grounding our understanding of statistics in cultural topics can help make the complexity of many sophisticated statistical concepts more approachable. Our understanding of data can become deeper when that understanding is rooted in the cultural conversations that surround us.

Importantly, cultural research is not just interesting to many of us—it also is research to which we likely have been exposed. Research has demonstrated that "new knowledge 'sticks' better when it has prior knowledge to stick to" (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010, p. 15). For example, in one study, students remembered more new facts about a familiar historical figure than about an unknown person (Ambrose & Lovett, 2014). In another study, participants remembered more soccer scores if they were more familiar with soccer than if they were less familiar (Ambrose et al., 2010). Susan Ambrose and Marsha Lovett (2014),

who have done much of the research in this area, specifically use statistical examples in their work. In one instance, they ask us

[to] imagine a student, Donna, starting her second semester of statistics, and her instructor asks the class to generate daily-life examples of variability before studying the concept more deeply. By calling these examples to mind, Donna is better able to connect her existing knowledge with new knowledge and hence learn the new material better. (p. 14)

Why not, then, use our existing understanding of culture to scaffold our learning of statistics?

Third, simply, we need statistics and research methods to help us understand culture and its role in influencing cognition and behavior. Statistics is an essential part of the process of learning about humans, our experiences, and our environment in both cultural and global contexts. We hope that this chapter will help you apply your knowledge of statistics to the interpretation of cross-cultural research findings. We hope it also will help you develop both a skeptical mindset with respect to statistical findings and a healthy, but appropriately critical, respect for the relative objectivity with which statistics imbues cross-cultural research.

Before we dive into the integration of statistics and culture, we want to acknowledge important and ongoing debates about the role that culture plays in the way many of us use statistics, conduct research, and approach science generally. In particular, these debates have included criticisms of Western approaches to research. For example, Western research has traditionally focused on presenting aggregate findings, rather than data at the level of individuals. Moreover, these findings have often led to conclusions about people separate from the cultural context (Tafreshi, Slaney, & Neufeld, 2016). Donna Tafreshi and her colleagues note that "quantification in psychology has historically been, and continues to be, a generally unreflective practice" (p. 233) that may not apply to cultures with different philosophical perspectives on whether and how human behaviors, thoughts, and emotions should be quantified.

These critiques are important ones, and we support an ongoing debate about the influence of culture on statistics, on science generally, and on the ways in which Western approaches fall short in generating explanations across all cultures. This chapter, however, will focus on the relation of culture to statistics traditionally defined, primarily because the research, including cultural research, that most of us read in traditional psychology journals uses the statistical approaches that we address here. We will also address some newer approaches—including the so-called "new statistics" and the open science movement—that are starting to address some of the biases. The current statistical brouhaha that has resulted in proliferation of these methods will help to address cultural bias by inserting even more objectivity in the process. Yet, we acknowledge that even these newer approaches are responses to problems with traditional statistics and, as such, are

also grounded in the Western statistical canon. We hope, however, that our focus on looking at the individual data points, as well as at patterns in the aggregate, will start to address at least some of these critiques.

We should also note that this chapter is aimed at an audience that has taken at least an introductory statistics course. It is our hope that this chapter will provide students and researchers with culturally based tools and resources to help them better understand statistics, as well as to demonstrate how statistics can lead to a deeper understanding of culture; however, we do not aim to teach the statistical concepts we reference.

# Statistics Is Built on Variability

Understanding the concept of variability is essential to understanding statistics. In most introductory statistics courses, variability is second only to central tendency in the syllabus and textbook because it is a necessary tool for everything that comes afterward. Some form of variability—whether standard deviation, variance, or sum of squared deviations—is a building block of just about every statistical formula. Here are just a few examples. The denominator of a t test is standard error. ANOVAs (analyses of variance) are essentially calculated by dividing one type of variance by another type of variance. And the numerator in one version of the formula for the Pearson correlation coefficient involves summing the products of a series of z scores (all of which include standard deviation or standard error in their denominators). Within the new statistics, confidence intervals simply expand a variability-based test statistic from a point estimate to an interval estimate. Similarly, a common kind of effect size, Cohen's d, includes standard deviation in the denominator.

Like statistics, culture cannot be understood except through the lens of variability. When we talk about the role of culture, we are talking about similarities and differences—that is, degrees of variability—across cultures. At the same time, we're careful to talk about individual differences, the variability that we find within cultures. Because statistical methods are employed to quantify these variabilities—both across cultures ("between" cultures in statistical language) and within cultures—we believe that statistics and culture are intrinsically linked as concepts, and should be taught and learned in tandem.

Leung and Cohen (2011) acknowledge the importance of both types of variability by noting,

Psychologists who study culture with a focus on prototypical members of that culture may end up ignoring a great deal of individual variation ... However, those who study individual differences alone may ignore the way those differences become meaningful only within a cultural system. (p. 508)

In their attempts to capture both individual and cultural differences, the authors studied a sample of Northern Anglo-Americans, Southern Anglos, Latinos, and Asian Americans. Their focus was on the cultural values of *dignity* (i.e., individuals hold inherent worth), *honor* (i.e., individuals have value in the eyes of others), and *face* (i.e., the respectability acquired by fulfilling one's role in a social hierarchy), as these values shape perceptions of fundamental issues such as morality, reciprocity, and punishment. They conducted experiments that made it possible to assess participants' willingness to endorse honor-related violence and to repay a favor to someone. As expected, they found variation within as well as between cultures, demonstrating that not all individuals internalize a culture's values to the same degree. As the authors note, "Individuals are always in a cultural context, though they are not always of it" (p. 522).

# Understanding Statistics Through Culture, and Understanding Culture Through Statistics

To better illuminate the links between culture and statistics, we will apply cultural examples to a series of statistical concepts that we have divided into three sections:

- 1 Understanding the Individuals Amid the Group
  - Central tendency
  - Variability
  - Data visualizations
  - Standardization
- 2 Be Wary of Significance When Crossing Cultures
  - Null hypothesis significance testing, including Type I errors and problems with reproducibility
  - Confidence intervals
  - Effect sizes
- 3 Cultural Insights from Relations Between Variables
  - Correlation, regression, and covariates
  - Psychometrics, including reliability, validity, and factor analysis

# Understanding the Individuals Amid the Group

#### Measures of central tendency

Measures of central tendency—means, medians, and modes—are, often unknowingly, invoked in conversations about diversity. Was the white, male, late-night TV host Jimmy Kimmel the right choice to host the 2018 Academy Awards Ceremony (popularly known as the Oscars)? Many people publicly opined that the producers

should have chosen a host or co-hosts who represented the gender, racial, and international diversity of the nominees, particularly in the #MeToo era. Thousands of viewers flooded Twitter with requests for the next year's hosts to be the hilarious female duo Tiffany Haddish, the black American daughter of a refugee from Eritrea, and the biracial Maya Rudolph. Across a range of situations, people often ask which aspects of diversity—race, ethnicity, gender, religion, language, country of origin—are being represented and which aspects are not. When they do this, they are asking, what is typical? What is the central tendency?

In statistics, variability is typically built around a central tendency. But what if that center is not truly representative? The problem of the unrepresentative center is captured perfectly in Kevin O'Keefe's (2005) book, *The Average American: The Extraordinary Search for the Nation's Most Ordinary Citizen*. In painstaking detail, O'Keefe described his arduous cross-country search for the individual U.S. resident who was most typical with respect to 140 characteristics, as quantified by a variety of sources, such as the 2000 U.S. Census. His methodology has been critiqued, but the details of his search prompt a number of questions about both what is typical and how diversity, or the lack of it, shapes our view of what is typical (Grimes, 2005).

O'Keefe did quantify his characteristics as much as he could. As he explained about one criterion, "According to the Census Bureau, more than four in five Americans live in homes with an external extension—a deck, porch, patio, or balcony. So, too, would J. Average," his nickname for the mythical Average American he was hunting (O'Keefe, 2005, p. 143), the American who

spends 95 percent of the time indoors, thinks abortion is morally wrong but supports the right to have one, owns an electric coffeemaker, has nine friends and at least one pet, and would rather spend a week in jail than become president. He (or she) lives within a 20-minute drive of a Wal-Mart, attends church at least once a month, prefers smooth peanut butter to chunky, [and] lives where the average annual temperature is between 45 and 65 degrees. (Grimes, 2005, para. 7)

With each additional characteristic, O'Keefe ruled out huge swaths of Americans. No one from Massachusetts or Rhode Island qualified because of the lack of Republican representation in Congress from those states (O'Keefe, 2005). Drink beer? You're out. Most Americans don't. Anti-gay? You're out, too.

Eventually, O'Keefe found Bob Burns, who was average on every last one of the 140 criteria. He is 5'8" tall, is a sports fan, has a deck on his house, likes to fish, and enjoys reading books. Burns's religious faith is important to him, he is accepting of diversity, and he prefers smooth peanut butter to chunky. Like the typical American, he has no desire to be famous. In fact, he embraced the "average" label O'Keefe bestowed on him. "What an honor," he quietly responded, then changed the subject, inviting O'Keefe to go fishing with him (O'Keefe, 2005, p. 222).

O'Keefe's quest is one of our all-time favorite statistics and culture examples because it is so clearly enormously flawed, thus highlighting the shortcomings of central tendency more generally. Although his hunt is valuable in helping to understand the qualities that typical Americans hold, Bob Burns himself—or any other individual O'Keefe might have held up as the Average American—exemplifies not only average-ness, but also all of the "non-average" qualities that he does not possess. This search calls to mind the enormous variability among Americans, or among residents of any other country, and how badly the identification of a prototype must ultimately fail. We think of O'Keefe's pursuit every time we see a mean or a median, particularly in a cross-cultural or international study, and we wonder just how does the average person in that study differ from everyone else from whom data were collected? What important aspects of people in the sample, or the population it is meant to represent, are simply not captured by that one number?

Moreover, even if we somehow managed to find a perfectly average data point that made sense as a representative score for one region or country, the person behind that score is unlikely to be representative of other countries or cultures. Compared to seeking the average American, it makes even less sense to ask what the average human would look like. Calculating a center doesn't make sense if there really isn't a useful mean, median, or mode. This problem plays out when a measure developed in one country or culture is used in another. If the actual mean in one country or culture is different from the actual mean in another, the measure is unlikely to be valid. In cross-cultural and international work, we often cannot tell from a single measure whether we are observing real differences or differences based on bias—for example, how members of different cultures respond to the various items that comprise that measure.

Norasakkunkit and Kalick (2009) provided an example in their efforts to assess what happens when applying social anxiety measures that were created and validated in Western samples to a non-Western sample. The authors point to research suggesting that the Social Avoidance and Distress Scale (SAD; Leary, 1991) and the Fear of Negative Evaluation Scale (FNE; Leary, 1983) are both instruments associated with levels of independence (versus interdependence). This finding suggests that, with respect to social anxiety, these scales are biased toward assessing the average, "healthy" person as considerably more independent than interdependent. It also suggests that the use of these instruments in cultures that value interdependence could lead to a misrepresentation of the average levels of emotional well-being in those populations. To test this, the authors conducted experiments on a sample of European-American students and a sample of Japanese students, hypothesizing that applying these instruments to the Japanese students would lead to an overstatement of mean levels of social anxiety. Experimental conditions within each sample were created so that participants' independence could be primed prior to completing the instruments. They found that "... cultural differences in social anxiety measures seem to misrepresent cultural differences in emotional well-being ..." (p. 321). "[T]he social anxiety measures examined here reflect a cultural component that is not necessarily related to emotional well-being, so that different social anxiety scores across cultures may not imply differences in actual emotional well-being" (p. 322). Thus, differences between mean scores (social anxiety) between cultures may not represent actual mean differences in the true construct of interest (emotional well-being).

### Measures of variability

One of the most basic forms of variability is standard deviation, calculated, essentially, by determining each data point's distance from the mean. Standard deviation basically tells us how much the typical person varies, or deviates, from the mean. In that, it suffers from some of the same culturally based criticisms we noted about measures of central tendency. What exactly do we mean by a typical deviation? One study, for example, investigated psychological and behavioral risk factors for cardiovascular problems among adults in the U.S. and Japan (Kitayama et al., 2015). One risk factor, alcohol consumption, was measured as the number of drinks consumed per week. The mean for the U.S. sample was 3.14, with a standard deviation of 5.52. For the Japanese sample, however, the mean was higher at 7.24, but the standard deviation was even more extreme at 11.75. When trying to understand risk factors among these two populations, we need to consider variability as well as central tendency. The larger standard deviation for the Japanese sample alerts us to the likelihood that there are more outliers in this sample than in the U.S. sample. Yet we do not know that the actual typical person varies from the mean by exactly this much. It may be that there are some really extreme outliers leading to both the higher mean and standard deviation, something we cannot know without looking at all of the individual data points. Moreover, because the scores cannot dip below 0, we know, mathematically, that people cannot vary this typical amount below the mean.

On the flip side, despite its flaws, variability can tell us really interesting things about culture. Most importantly, if we pay attention to variability as well as central tendency, we can get a sense of individual differences for a given construct, a reminder that there is always a great deal of overlap, even when there are mean differences. As psychologist Qi Wang (2016) explained, "Upon observing group variations in a psychological construct of interest within a multicultural sample, a researcher who dismisses the variations, partials them out in analysis as meaningless noise, or simply accepts them as is may lose potentially groundbreaking findings" (pp. 585–586). The noise, then, can be just as interesting as the signal. This is true, for example, for the difference in the standard deviations for alcohol consumption between U.S. and Japanese samples that we discussed above (Kitayama et al., 2015). The notable difference between standard deviations can prompt us to compare the overall pattern of the two distributions.

Variability also has another important lesson for us with respect to culture—the importance of exploring similarity. Specifically, the realization that variability

within groups often dwarfs the difference between groups is a reminder that, for many constructs, we are clearly more similar across cultures and countries than we are different (Wang, 2016). In fact, Moghaddam (2012) has suggested an approach to reducing intergroup problems by educating people about the fact that we share a striking number of similarities across cultures and countries. He suggests focusing on the myriad characteristics that we share across groups around the world before discussing group differences. Moghaddam values discussions of difference and diversity, but encourages researchers to steep these discussions in explorations of similarity, lest they lead to divides. In the next section, we will discuss data visualizations of variability. Actually *seeing* the variability in a distribution of data can increase our ability to understand more viscerally the often enormous overlap among groups, a reminder of our similarities.

## Data visualizations (and variability)

Graphs and other forms of data visualizations allow us an even deeper understanding of variability, with different ways of depicting our data giving us different amounts of information about spread. To better understand variability, take one data set and graph it in multiple different ways using increasingly complex graphing formats. For the purposes of this activity, use a data set that depicts scores on a continuous scale measure for two groups. (If you're reading this chapter, perhaps you do cross-cultural or international research or have access to data from these areas. If yes, use a cultural difference that you found. If not, go download some international data from the fantastic data.world site.\(^1\)) Here, we will introduce several different formats to depict these data, all of which can be created without sophisticated graphing software; you can just use Microsoft Excel.

Start by creating a simple bar graph that depicts the group difference. We used the positive affect data described in note 1 for the 82 countries that had positive affect scores for both 2006 and 2016. This bar graph shows the lack of variability across the 2 years, but nothing more (Figure 5.1). Next, add error bars to give a sense of the variability within each of the two groups. Here, we used standard deviation for the error bars, which demonstrates the variability across countries at each time point.

Now, create side-by-side box plots (Figure 5.2). The box plots provide additional nuance, depicting the interquartile range for each of the groups. Here, we can see that there seems to be a negatively skewed distribution of positive affect scores in 2006, but a more normal distribution in 2016. At each step, we learn more about the group difference by seeing more of the variability in each group.

But we still don't see the individual data points within each group, which is the only way we can capture visually all of the variability. We agree with Wang, who observed that, "cultural psychology by no means downplays the importance of individual differences" (2016, p. 587). In fact, excluding the consideration of individual differences can give a false sense of the group difference. For example, in a study by Gökcen, Furnham, Mavroveli, and Petrides (2014), there was a reported

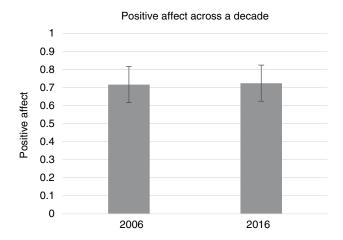


Figure 5.1 Simple bar graph with error bars.

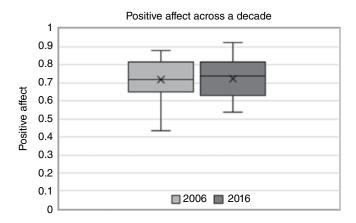


Figure 5.2 Box plots.

difference between British participants and Chinese participants on a measure of trait emotional intelligence. A simple bar graph could easily lead to interpretations that falsely imply that *all* individuals in the UK are higher on trait emotional intelligence than *all* individuals in China. Graphs that provide some idea of variability, like either bar graphs with error bars or box plots, are helpful, but graphs that include all of the data points emphasize the difficulties in drawing broad conclusions about group differences.

So, as an additional step, create a dot plot for your data. In the dot plot in Figure 5.3, we can see the distribution of every individual data point for each country at both time points. The aggregate difference is important, but so is the variability among individuals. For example, here we can see that there are some low outliers in 2006, but no high outliers; conversely, in 2016, there is only

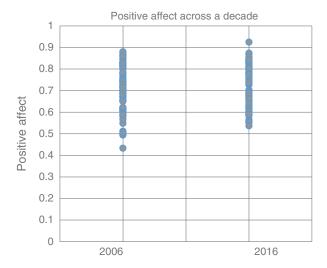


Figure 5.3 A dot plot.

one apparent outlier, on the high side. (You also can look at the individual data points with a data set in which there are continuous scale data on two different measures for a sample. Create a scatterplot that includes a line of best fit. It is easy to see that the line of best fit might imply that the relation is stronger than it is, but the inclusion of the dots in the scatterplot reminds us that a given finding is not true for everyone. If you're using the World Happiness Report data, try this for the negative and positive affect measures at either time point.)

The data set we used for the previous demonstration was relatively small, at least compared to some of the "big data" data sets that exist. Data visualization, however, can be used even with millions of data points, offering arresting images that can enhance our understanding of large numbers of people. One particularly compelling example is Dustin Cable's (2013) interactive The Racial Dot Map of the United States, based on data from the 2010 U.S. Census: (http://demographics.coopercenter.org/racial-dot-map). With separate dots, color-coded by race, representing the more than 300 million Americans, you can instantly determine which regions, towns, and neighborhoods are more racially integrated than others, and which are markedly segregated. Data visualizations like this are striking reminders that every research finding involves real people. Returning to findings about cultural and other differences, it becomes harder to fall into the mindset of stark, overlapping group differences.

#### Standardization

The next logical step after mastering central tendency and variability with respect to culture is combining the two concepts. If you know the mean and the standard deviation for any distribution, for example, you can turn any single data point in that distribution into one type of standardized score, the *z* score. A *z* score is

calculated by subtracting the mean from a raw score, then dividing by the standard deviation. It tells us where that score falls in terms of standard deviations from the mean.

Why are z scores useful for understanding culture? As van de Vijver and Leung (1997) pointed out, "culture-level analyses can yield strikingly dissimilar results for standardized and nonstandardized data" (p. 88). In other words, if we standardize entire data sets of the same construct for different cultures, we can then examine that particular construct while controlling for any cross-cultural differences in means and standard deviations. Thus, standardization allows us to see overall patterns in responses in different cultures, even when the aggregate responses—as indicated by the mean—are different in those different cultures.

Our favorite example of the ways in which standardization can help us understand global data arises from two studies on the fascinating topic of dating and mating behaviors. In 1990, David Buss and his fellow researchers reported data from 37 different cultures (Buss et al., 1990). In every one of those cultures, women rated the earning potential of their mate higher than men did in terms of a valued characteristic. Buss and colleagues interpreted this clear cross-cultural finding as an indication that women place more value on a man's earning power than men do on a woman's.

Alice Eagly and Wendy Wood disagreed (1999). They reanalyzed Buss's data and found that ratings correlated with gender equality. When women had their own earning potential, they were less likely to value a partner's earning potential. So, researchers would need to standardize ratings across cultures if they wanted to see if any particular gender pattern were universal. Standardization would allow a researcher to understand gender difference within each culture in terms of standardized scores rather than actual scores. So, if ratings of earning potential tended to be higher or lower in particular cultures, this would wash out in the overall analysis.

# Be Wary of Significance When Crossing Cultures

Central tendency and variability are the building blocks for the rest of statistics, including null hypothesis significance testing (NHST). In this section, we will explore the problems with NHST, and how these problems relate to culture. Then, we will address some of the fixes, including the use of the new statistics.

Null hypothesis significance testing (including Type I errors and the quest for reproducibility)

Whether we reject our null hypothesis or fail to reject it, every time we finish an analysis using NHST, we may have made a mistake. This is just as true for cross-cultural findings as it is for any other type of research, but a mistake in analyzing

cross-cultural data runs the risk of increasing stereotypes. One way we can be wrong is failing to reject the null hypothesis when there actually is a real difference—a Type II error. But perhaps the more dangerous mistake is a Type I error—when we reject the null hypothesis when there really is no difference. Of course, we never know for certain whether we've made a mistake, but a recent movement in statistics has highlighted the fact that it's likely that we often do make mistakes.

A movement toward reproducibility and open science has burgeoned as many studies in psychology and other fields, many of them classic and oft-cited studies, have failed to replicate (Diener & Biswas-Diener, 2018). The field of psychology rewards those with exciting new results, so there has long been a lack of incentive to repeat someone else's work. The open science movement is changing that. So, if we repeat a study with a new sample or in a new context and get the same results, we can start to feel more confident that those results are accurate and we can generalize beyond the original study. If we fail to get the same results, however, there are two possibilities. First, the original finding may have been a Type I error. Second, there may be something important that is different about the second sample or context. In cross-cultural research, it may be that the difference between the two samples or contexts relates to culture

We find the work of Ramsay, Tong, Pang, and Chowdhury (2016) especially admirable because of the way they considered the possibility of a Type I error in their own experimentation. The researchers began with an interest in seeing if priming people in Singapore to think of "religion" or "God" shaped their perceptions of those from ingroups versus outgroups. This manipulation revealed an unexpected gender difference—women provided more negative ratings toward outgroup members, on average, than did men. But Ramsay and colleagues did not stop there. Because this gender difference was not anticipated, they were willing to question its validity. The researchers conducted a follow-up experiment that focused exclusively on ratings of those in outgroups. The findings from this assessment were not significant—there was no evidence that there were differences between men and women in their ratings of those from outgroups. In summing up their efforts, Ramsay and colleagues note that the findings from their first experiment were more likely due to a Type I error than to a true difference between the women and men of Singapore.

In some instances, lack of replication facilitates an understanding of true cultural differences. Benitez, He, Van de Vijver, and Padilla (2016) provide an example of this from their assessment of samples taken from Spain and the Netherlands. In assessing responses to a quality of life measure, the researchers took note of how a pattern of responding differed between the two samples. They saw that Spanish respondents provided more extreme ratings than did the Dutch respondents, but this pattern was flipped when participants had to use frequency scales that included "never" as an anchor. In these instances, those from the Netherlands were more

inclined to provide extreme ratings than were those from Spain. This lack of replication across cultures led the researchers to probe more deeply. In addition to administering the quality of life measure, Benitez and colleagues conducted interviews with participants from each country sample. They found notable differences in how participants from each culture perceived the items on the rating scales. While Dutch respondents focused on the exact wording of an item, Spanish respondents had strong reactions to the word "never." For instance, one Spanish participant said, "Rarely is like almost never, but never is weird ... there is nothing that never, never happens." Another said, "These options, rarely and never are very negative ... I tried to find something better." Thus, important differences were found in the interpretation processes of participants from each culture. As Benitez and colleagues acknowledge, it was the lack of replication in their initial quantitative assessment that spurred deeper inquiry. By complementing their first inquiry with a second, qualitative one, the researchers were able to identify a subtle but important cultural difference.

A final note about replication. Although we see the enormous value in replicating cross-cultural and international research, we realize that these areas may pose special problems. As Anne-Wil Harzing noted, not all research is easily replicated (2016). Speaking about some types of international research, "data collection is typically very time-consuming and fraught with many problems not encountered in purely domestic research" (2016, p. 563). Harzing laments this difficulty, believing that replication is perhaps more important in international work "because differences in cultural and institutional environments might limit generalization from studies conducted in a single home or host country" (p. 563). Even though it can be more difficult to replicate cross-cultural and international research, and even though it may mean having to part with long-accepted findings, it is worth the work. Psychologist Lisa Feldman Barrett (2015) values the open science movement, even when the lack of reproducibility is frustrating. She wrote, the "failure to replicate is not a bug; it is a feature. It is what leads us along the path—the wonderfully twisty path—of scientific discovery" (2015, para. 14).

#### Confidence intervals

Earlier, we discussed the fact that statistically significant mean differences are often interpreted as pertaining to all members of each group—everyone in one culture is higher on a given measure than everyone in a second culture. This is almost never true; perhaps it is never true. (Benitez and colleagues' Spanish sample would likely agree!) A related problem is that statistically significant mean differences are interpreted as important or meaningful. Yet, we know that large samples sizes are likely to lead to statistically significant findings even for tiny mean differences. In 2012, Geoff Cumming, in his book, *Understanding the New Statistics*, urged social scientists to move away from NHST and embrace what he called the "new statistics." The new statistics—including confidence intervals and effect sizes—was

not actually new, but Cumming hoped that its widespread use would be new and would permanently change the way findings were analyzed, reported, and interpreted. Since 2012, numerous academic journals and professional associations, including the American Statistical Association, have issued statements suggesting or, in some cases, requiring the use of the new statistics in reports of research (e.g., Appelbaum et al., 2018; Association for Psychological Science, 2014; Trafimow & Marks, 2015; Wasserstein & Lazar, 2016).

So, the new statistics seems be here to stay, and it provides us yet another tool to clearly and accurately analyze and report cross-cultural findings. And cross-cultural researchers have described the pitfalls of relying on null hypothesis significance testing.

Theoretically, [NHST] may lead to the construction of knowledge based on stereotypes ... Practically, programs for intercultural sensitivity, training, competence, adjustment, and the like are based on cultural stereotypes, providing consumers with incorrect guidelines that may be more harmful than helpful. (Matsumoto, Kim, Grissom, & Dinnel, 2011, p. 246)

Because of these dangers, we believe it particularly important for cross-cultural and international research to adopt routine use of the new statistics instead of or in addition to NHST. We will explore two of the forms of new statistics in this chapter—confidence intervals here and effect sizes in the next section.

As we discussed earlier, an emphasis on variability can diminish inaccurate interpretations of group differences as a stark divide with all members of one group higher than all members of another group. Highlighting variability allows readers to imagine overlapping distributions. Another statistical tool to highlight variability involves interval estimates instead of point estimates (Matsumoto et al., 2011). Many other sciences already rely on interval estimates. For example, physicists would report "the melting point of the plastic was 85.5 ± 0.2°C" (Cumming, 2012, p. ix). Interval estimates remind us that the sample mean is just that—the mean of this particular sample and not necessarily the mean of the population. Moreover, they give us a range of plausible values so we can have a better sense of what really might be true of the population. For both reasons, the interval estimate leads to a clearer report of findings. This is not just a guess. One study randomly assigned researchers to interpret data based only on an interval estimate or to interpret data based on both the interval estimate and the results of NHST. The researchers who saw only the interval estimate tended to be more accurate in their interpretations than those who also saw the results of NHST (Coulson, Healey, Fidler, & Cumming, 2010).

Consider an example of a study in which confidence intervals make the findings much clearer and more easily and accurately interpreted. Anna Döring and her colleagues (2015) reported confidence intervals in a six-country study about

children's values, including openness to change. Children who were open to change were those who liked to explore the world and try new things. Here are the confidence intervals for openness to change scores in samples from six countries:

Poland: (2.91, 2.99) Bulgaria: (2.96, 3.04) Italy: (3.02, 3.11) Germany: (3.04, 3.09) United States: (3.25, 3.46) New Zealand: (3.29, 3.46)

By presenting ranges of plausible values, these confidence intervals immediately remind us that the estimates from these samples are simply estimates. Moreover, we can tell at a glance which countries have statistically significantly different levels of openness to change from each other. Whenever there is overlap between confidence intervals, such as between the U.S. and New Zealand or between Bulgaria and Italy, we know that there is not a statistically significant difference. When there is not overlap between groups, however, such as between Poland and Germany or between Italy and New Zealand, we know that the means are significantly different from each other. But just because we know that there is a significant difference doesn't mean we know how large or meaningful it is. Does it make a difference in the lives of children in New Zealand that they are, on average, more open to change than children in Poland? That's what effect size, discussed in the next section, can help us to answer.

#### Effect sizes

Variability helps us to visualize the overlap between groups. Effect size helps us quantify that overlap. One of the most basic measures of effect size, Cohen's d, is the difference between two groups in terms of standard deviation. We can convert any Cohen's d into an estimate of the degree of overlap between two distributions. Jacob Cohen, who developed Cohen's d, developed conventions, or guidelines, that we can use to interpret the statistic. Cohen (1988) considers a Cohen's d of 0.2 to be small. It indicates just 0.2 standard deviations difference between two group means and an estimated overlap of 85% between the distributions. Think about two distributions as two normal curves and imagine them almost entirely overlapping. For a small effect size, it is a terrible idea to make any predictions about a particular individual in either group.

Indeed, David Matsumoto and his colleagues wrote about just this type of situation, observing that

A significant [finding] in a cross-cultural study, therefore, does not necessarily mean that most people of one culture have an appreciably greater score than most people

of another, nor that the average person from one culture will have a substantially higher score than the average person from the other, nor that a randomly selected individual from one culture will very likely have a higher score than a randomly selected individual from the other. (Matsumoto, Grissom, & Dinnel, 2001, p. 479)

Even a medium Cohen's d of 0.5 indicates 67% overlap. And a large effect size of 0.8—which is almost a whole standard deviation of difference between means—still indicates about 53% overlap.

Rašković (2013) was interested in taking a practical look at leadership qualities across Slovenia and Portugal, as representative of East-West cultural differences in Europe. Graduate-level business students in both countries completed the Leadership Practice Inventory (LPI), a self-report instrument frequently used for assessing cross-cultural leadership practices. The instrument examines five components of leadership, such as "modeling the way" (e.g., creating standards and objectives of excellence) and "encouraging the heart" (e.g., recognizing individual contributions) (p. 11). The author compared multiple measures for assessing effect size across the components of the LPI, concluding that two of the five showed statistically significant effect sizes. Portuguese respondents provided higher mean ratings than Slovenian respondents on "modeling the way," while Slovenian respondents provided higher mean ratings for "encouraging the heart." But the average difference on the former measure had a small effect size. Only "encouraging the heart" displayed a moderate effect size (d = 0.484), leading Rašković to suggest that only this factor should be considered culturally dependent. Remember, an effect size of 0.5, not much larger than this one, indicates 67% overlap, meaning there is still a good deal of overlap between the Portuguese and Slovenian responses on this measure. Rašković concluded that the lack of meaningful differences between the two cultures, as quantified by the effect sizes, suggests there is value to be found in understanding leadership as a universal construct rather than one that is culturally based.

Not everyone understands the concept of overlap as intuitively as Rašković seems to. Without an awareness of effect size, the statistically significant differences identified here could inaccurately lead one to conclude that all Portuguese respondents are higher than all Slovenian respondents on the measure of "modeling the way," and all Slovenian respondents are higher than all Portuguese respondents on the measure of "encouraging the heart." There are two problems with this common mistake, as we noted previously. Distributions almost always overlap, and they overlap in ways that can be quantified. The differences between the respondents in this study were statistically significant but the first finding had a small effect size, so we know there is considerable overlap among respondents in the two cultures on this measure. The second measure showed a difference that had a moderate effect size, meaning, as noted above, that there is still overlap in responses from 67% of the two samples. And even with this moderate effect size, we are still not certain about the perceptions of

any individual respondent in either culture. We need to be careful in interpreting these and other findings. Without knowing effect size, we run the risk of overstating cultural differences.

We also know that effect size often relates to the size and composition of one's sample. These factors played a core role in Pirutinsky's (2013) desire to re-examine claims about the link between religiosity and well-being. Although there is general agreement that a link exists between these constructs, the causal mechanisms underlying this connection have yet to be fully understood. Pirutinsky pointed to the work of Gebauer, Sedikides, and Neberich (2012) in which the researchers claimed that it is the social value placed on religion that leads to greater well-being among those in the culture who live in accord with this value. But, Pirutinsky noted, this research included a large sample of respondents (N = 187,957) obtained through a European dating site, and the effect sizes among the findings were small. This is both a very large and somewhat restricted sample. In re-examining the link between these variables, Pirutinsky obtained data from 51,142 people through the European Social Survey, a population survey covering 26 countries that includes items pertaining to religiosity, psychological adjustment, happiness, and subjective health. This sample was smaller, though not small, and, arguably, more representative of the overall population than that used by Gebauer and colleagues. Pirutinsky found that the link between religion and health was considerably more complex and nuanced than claimed by Gebauer and colleagues. His findings showed several interactions among variables related to personal and country-level religiosity, and happiness. Thus, Pirutinsky's results supported the claim of Gegauer and colleagues that social context appears to affect the link between religiosity and well-being but evidence for attributing this link to the values of a culture was limited. Pirutinsky concluded by pointing out that "[s]tudies using cursory measures (e.g., country-level religiosity) will likely explain only a small proportion of the variance, yield contradictory findings, and fail to significantly enhance theoretical understanding of the connections between religion and psychological adjustment" (p. 784). And it was a large sample combined with a small effect that spurred the work that led to this understanding.

When we calculate and report effect sizes, it helps us to avoid drawing broad generalizations about cultures. It can even remind us of the often enormous similarities between groups, rather than their differences (Wang, 2016). Ball, Cribbie, and Steele (2013) asked "What is the largest difference between the population means that would *not* be meaningful in the context of the study?" (p. 150). In this way, they are asking us to consider how big an effect size we need to find before we consider two groups to be different. In a way, they are asking us to quantify what we consider similarity by suggesting that we decide the point at which two groups do differ significantly, but that it just does not matter in any practical sense.

# Cultural Insights from Relations Between Variables

Correlation, regression, and covariates

So far, we have focused on mean differences between groups, but another set of statistical analyses—those built on relations among variables—can offer a different and complementary window into culture. All of these analyses are built on correlation, the most basic of these analyses. The Pearson correlation coefficient, and the simple linear regression and multiple regression analyses that are developed from it, are key in understanding differences across cultures and countries.

We see how correlation affects our understanding of cultural influences in a study that examined differences in social support. There is a documented link between social support and risk-taking. For instance, where we see greater social support in the form of more positive parent-child relations we also tend to see fewer risky behaviors in adolescents. Wang, Zhou, and Hu (2016) sought to expand on a derivation of this research by assessing whether those with more social support make riskier financial decisions. That is, those with greater social support have a broader network of people from whom to seek assistance should a problem arise. Yet, the authors pointed out, culture may play a role in understanding connections between social support and risky behavior because social support emerges in different forms around the world. The authors distinguished emotional social support from the type of support that provides advice or information. To assess each type, the researchers studied White North American students, who tend to experience more emotional support and less guidance than Chinese students, and Chinese students, who tend to experience less emotional support and more support in the form of guidance than White North American students. They found that the type of support correlated with risky behavior such that the Chinese students were more likely to make risky financial decisions than were the North Americans. In total, they found that emotional support was negatively correlated with risktaking while guidance was positively correlated with it. The variation in how social support occurs contributes to our understanding of cultural differences.

Both correlation and simple linear regression, then, can illuminate the ways in which variables associate with each other in similar ways or in different ways depending on the global and cultural context. When correlational patterns differ, it can spur us to ask why. Might there be a pertinent third variable in one culture that is moderating or mediating one of the variables included in the correlation?

Research has shown that intrinsic religiosity mitigates the effects that poor health can have in leading to depression. But researchers are yet to fully understand the mediating components involved in this link. Does religiosity bring with it positive mental states that serve as a buffer against depression (e.g., Pargament, 1997), or do those high in religiosity also experience increased social support (Koenig, Larson, & Larson, 2001; Koenig, McCullough, & Larson, 2001), with the social support serving as the protective quality? Pirutinsky et al. (2011) wanted to

examine these possible mediators by comparing Orthodox and non-Orthodox Jews. This population was especially valuable in examining religiosity because non-Orthodox Judaism values "collectivist, social religiosity" more than it values religious mental states, as is found among Orthodox Jews (p. 489). Thus, social support should mediate the relation between religiosity and well-being for non-Orthodox Jews but not Orthodox Jews. Pirutinsky and colleagues asked participants from each sample to respond to a series of questions addressing religiosity, physical health, depressive symptoms, and social support. Findings supported the researchers' predictions. Although intrinsic religiosity lessened the degree to which poor physical health led to depression across both samples, it was mediated by social support for only the non-Orthodox Jews. The authors noted that religion is highly diverse across cultures. Understanding the complex mechanisms involved requires researchers to delve into the context of those under study. In their words: "It is unlikely that research using cursory measures (e.g., frequency of religious service attendance) and heterogeneous samples will enhance our understanding of religion and health" (p. 494).

Questions like the generic one we posed above often have statistical answers. Maybe we have a guess as to the third variable that is meddling with our correlation in one culture but not another. If we do, and if we can measure it, then we can include that variable in a multiple regression with the two variables originally included in that correlation. Or we can include that third variable in other statistical tests, including ANOVAs as a covariate. As van de Vijver and Leung (1997) explained, covariates are "highly useful in cross-cultural research because of the frequent presence of such experimentally controllable differences" (p. 119). We would add that cross-cultural research is also highly useful in understanding statistics because it is an easy research area in which to see how additional variables can be enormously important.

#### Psychometrics: Reliability, validity, and factor analysis

Another set of statistical analyses based on correlation, psychometric analyses, have long been the subject of debate among cross-cultural researchers, particularly when different languages are used across contexts or when vocabulary or grammar of the same language may have different meanings across cultures. Psychometric analyses include measures of reliability and validity as well as factor analysis. All are used in the development of measures. Anyone who has conducted or read cross-cultural or international research has discovered the limitations inherent in using a measure outside the context in which it was developed, as well as the difficulties in adapting any instrument for cross-cultural or international use. If a measure of, for example, life satisfaction, has proven reliable and valid in the U.S. and Canada, will it have the same meaning, and, therefore, the same degree of reliability and validity, in Trinidad and Tobago? If factor analysis has determined that the same life satisfaction measure has, say, two factors in the U.S. and Canada, will it still have two factors in Trinidad and Tobago, and will the two

factors comprise the same set of questions? Moreover, the U.S. and Canada contain many different regional and cultural subgroups, as do the richly diverse islands of Trinidad and Tobago. Will that measure of life satisfaction hold the same meaning even across cultures within those countries?

Chen (2008) highlighted several issues that can affect factor loadings when applying an instrument across cultures. She pointed to the following:

- a Definitions do not necessarily convert from one culture to another. For example, the concept of self-esteem for North Americans seems to relate to personal attributes and achievements, whereas in Eastern cultures it may be related to interdependence and relationships with others.
- b Literal translations of measures may not convert properly, leading to weaker factor loadings in a culture different from the one in which the instrument was created.
- c There may be cultural norms regarding extreme responses. For example, U.S. participants tend to use extreme ends of scales more frequently than do people from China.
- d There are also concerns pertaining to social desirability. Respondents often provide ratings that speak to how they want to be perceived. Thus, ratings reflect the different values we see as we move from one culture to another.

#### In total, Chen argues,

When the reference group [the one where the instrument was created] has higher loadings or intercepts, the mean is overestimated in that group but underestimated in the focal group [the one in which its been imported], resulting in a pseudo group difference. (p. 1005)

Let's look at a real-life example. Keowmani and Lee (2016) wanted to examine the quality of life of individuals living with beta thalassemia, an inherited blood disorder, affecting those of Mediterranean, African, and Southeast Asian descent. The Malaysian state of Sabah is home to a large number of people living with this disorder. The researchers sought to use the Specific Thalassemia Quality of Life Instrument (STQQLI) in assessing this population. This instrument had, to date, only been validated with a Greek population (Lyrakos, Vini, Aslani, & Drosou-Servou, 2012). For the population from Sabah, the English version was translated into Malay by both forward and back translation, with the content validated by a physician. But after administering the STQQLI to 82 patients in Sabah, the researchers found that the internal structure of the instrument did not replicate with that found in the Greek population. Exploratory factor analysis showed differences in the number and composition of the factors. Keowmani and Lee noted possible differences between their research and that done with the Greek population. These include differences in the make-up of the populations, especially with respect to

the less-educated sample from Sabah; literacy levels may have affected comprehension. They also considered cultural differences in how the items were understood. For instance, it seems that the Greek patients considered items addressing the time allocated for their medical treatments to be different from how they conceptualized time spent on social and work life. The Sabah patients did not differentiate how they thought of time across these activities. An exploration of such differences in factor analysis across cultures leads both to a deeper understanding of this cultural difference and to a deeper understanding of the mechanics of factor analysis.

#### Conclusion

Linking culture with the teaching of statistics helps provide us with the knowledge and skills needed to responsibly analyze and interpret data. As our society becomes increasingly globalized, the need to communicate across cultures is growing in importance. Understanding how to differentiate fundamental psychological principles from those that are culturally dependent is at the core of this success. And skillfully conducting and interpreting statistical analyses is a primary means for making such discoveries.

The discipline of psychology, within and between cultures, is confronting issues of replicability and the need for transparency. We see more and more instances of researchers and practitioners questioning the validity of published findings. Although there are, unfortunately, instances of data manipulation, many of the replication failures pertain to how data were collected or analyzed. As noted by Lisa Feldman Barrett (2015), such challenges are at the core of the scientific process. Attempts to move the discipline forward now stress greater transparency with respect to hypotheses and methods, and the sharing of data so peers can conduct their own analyses. As psychology researchers and students, we need to raise our own awareness of these issues, and carefully apply them to our own cross-cultural research and to our interpretations of others' research.

We urge those within the discipline of psychology to think clearly about the connection between their primary research questions and the assumptions that shape data analyses and interpretation. Learning proper computation is only the first step. We hope we have demonstrated the value of cross-cultural psychology in highlighting the need to dig deeper into our data. For instance, making the distinction between basic and applied research can yield important shifts in how statistical analyses are done and understood.

With respect to basic research, the quest to identify universal principles of psychology is ongoing. For instance, the link between statistical significance and effect size has important meaning with respect to the generation of new hypotheses or for further inquiry that can tease apart variables. As we note above, unexpected

findings with small effect sizes may very well require further explanation to better differentiate true cultural variation from a Type I error, and to help us identify cultural similarities. Even small differences—and the lack of differences—hold the potential to yield important insights.

With respect to applied research, the goal is to understand phenomena as they occur in real time. Findings used to create social policy or start community programs push researchers to think clearly about impact. As in the research of Rašković (2013), described above, statistically significant differences are less important than understanding the size of the differences between cultures. Significant differences with small effect sizes may tell us more about similarities than differences, an important issue when instituting social programs. There are many instances in which practical impact matters as much or more than statistical significance.

In total, using the global community as a learning base for understanding statistics takes us to some of the most fundamental lessons in understanding data. We see it as a highly effective means of deepening our skills as researchers. And we believe that the combination of culture and statistics offers valuable lessons to the international psychology community.

#### Note

1 We love the global data sets available at data.world (https://data.world). Feel free to explore to find one to use for the graphing example here. Try searching for "international" and any social science topic of interest. Or just use the data from the 2017 World Happiness Report. You may download the actual report and view the data here: http://worldhappiness.report/ed/2017 But data.world user Laurel has done the heavy lifting for us. You may download her Excel spreadsheet and the data dictionary that describes the variables here: https://data.world/laurel/world-happiness-report-data. Once you download the data, choose only the data that represent two individual years for the countries in the data set. We recommend 2006 and 2016 because most countries have these data points. Now choose a continuous variable. We recommend life ladder (an overall happiness score), positive affect, or negative affect. Use these data to create the graphs described in the coming paragraphs, and visualize the difference over time between happiness, positive affect, or negative affect scores.

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# Infusing Diversity into Research Methods = Good Science

# Linda M. Woolf and Michael R. Hulsizer

As we look around the globe, one fact becomes immediately apparent—humanity is marked by remarkable diversity as well as similarity. Just within the United States, the population reflects a striking tapestry composed of variations in culture, education, gender identity, race, age, ethnicity, religion, sexual orientation, language, ability status, employment, socioeconomic status, and other elements of diversity. We live in an interconnected multicultural and international community with multi-layered, intersecting threads representing potential areas of study and understanding. Researchers may elect to study not only one element of diversity but also how this element may differ across cultures and/or intersect and interact with other elements of diversity. For example, one might choose to study gender differences within a culture, differences between two or more cultures related to gender, or the intersection of gender identity and sexual orientation either within or across cultures. Regardless, it is imperative that researchers conduct their investigations in a methodologically valid and culturally appropriate manner. It is not enough simply to include some element of diversity as a variable to study. Rather investigators must take care to ensure that the methods chosen to research that variable are adequate, appropriate, and ethical. Failure to conduct cross-cultural or diversity research with an eye toward appropriate methodology may result in faulty results, erroneous conclusions, and harmful outcomes.

Despite the spectrum of diversity as one looks around the globe, psychological research and study within the U.S. often has failed to reflect that diversity. In 2007, Louis Kincannon, Director of the U.S. Census Bureau reported, "About one in three U.S. residents is a minority. To put this into perspective, there are more minorities in this country today than there were people in the United States in 1910" (2007, para. 1). In 2016, the Pew Research Center reported that by the year

2055, the United States will no longer have a single majority population—the country is becoming even more diverse with every passing year (Cohn & Caumont, 2016).

In contrast to the growing diversity within the United States, there is still a paucity of published research focusing on racial or ethnic minorities within psychology journals (e.g., Bernal, Trimble, Burlew, & Leong, 2003; Henrich, Heine, & Norenzayan, 2010; Lau, Chang, & Okazaki, 2010; Rivera-Medina & Caraballo, 2016; Sue, 1999; Sue & Sue, 2003). Previously, some researchers simply failed to report the racial and ethnic background of study participants (Buboltz, Miller, & Williams, 1999; Delgado-Romero, Galván, Maschino, & Rowland, 2005; Munley et al., 2002). According to Delgado-Romero et al. (2005), only 57% of examined counseling articles published between 1990 and 1999 reported race and ethnicity. Their analysis also revealed that White and Asian-Americans were overrepresented in counseling research, whereas African-Americans, Hispanics, and American Indians tended to be underrepresented as compared to the U.S. population.

Increasingly, largely due to the importance of multicultural awareness in research, racial, and ethnic groups are no longer simply omitted from reports of sample populations. For example, Buboltz et al. (1999) examined articles published in the *Journal of Counseling Psychology* during the 1970s. The researchers found that less than 10% of researchers reported the race/ethnicity of their samples. That figure has steadily risen to 98% in 2009 (Buboltz, Deemer, & Hoffmann (2010).

Finally, it is also important to note that issues of diversity have been historically neglected across much of the psychology curriculum (Guthrie, 2004). For example, despite the fact that approximately 45% of articles indexed in PsycInfo<sup>©</sup> included authors from outside the United States (Adair, Coelho, & Luna, 2002), Introduction to Psychology, Life-Span Developmental Psychology, and Social Psychology textbooks included little of this research (Woolf, Hulsizer, & McCarthy, 2002). In 1993, Betancourt and López asserted that "the study of culture and related variables occupies at best a secondary place in American (mainstream) psychology" (p. 629). Since that time there have been increasing efforts aimed at multicultural education within psychology. However, discussions of diversity still tend to be compartmentalized within courses, texts, and certain faculty. According to Pickren and Burchett (2014), "even now, it seems that emphasis on training psychologists for a diverse world remains primarily a concern of ethnic minority psychologists" (p. 13).

Fortunately, efforts continue to increase both an awareness of and research concerning diversity, cross-cultural issues, and international research within psychology. For example, in January 2000, the Council of National Psychological Associations for the Advancement of Ethnic Minority Interests (CNPAAEMI) produced the *Guidelines for Research in Ethnic Minority Communities*. Five ethnic minority

associations within the American Psychological Association (APA) collaboratively worked to create a document reflecting issues relevant to research with African-American, Asian-American, Hispanic, and Native American populations.

In 2003, APA published the *Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists* and in 2005 and 2008 hosted Education Leadership Conferences devoted to diversity and international issues, respectively. In 2017, APA published *Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality* (APA 2017b). Indeed, the APA (2018) vision statement identifies the Association as, "A principal leader and global partner promoting psychological knowledge and methods to facilitate the resolution of personal, societal and global challenges in diverse, multicultural and international contexts" (para. 11).

In 2005, the APA Working Group on Internationalizing the Undergraduate Psychology Curriculum, in concert with the American Council on Education (ACE), published a set of recommended learning outcomes for psychology courses (Lutsky et al., 2005). The report noted that psychology has long been both international as a science and as a profession with early psychologists working in such diverse countries as Argentina, India, Japan, Mexico, New Zealand, and Russia. Goal 2 of the report focused on research methods and highlighted that, "Students should be aware of research methods and skills necessary for international research competence" (p. 3). Five learning outcomes were presented in relation to research methods, specifically that students will develop: (a) the ability to access and read journals published outside the United States. (b) the ability to identify and appreciate the range of research methodologies used by psychologists around the globe (e.g., ethnographies, observations), (c) an awareness of ethical issues that may be of concern in other countries (e.g., protection from harm), (d) an understanding that many constructs may have different meanings in different cultures, and (e) an appreciation of the dangers associated with making broad generalizations based on small and potentially unrepresentative samples.

In this chapter, we focus on a number of issues related to the role of diversity in understanding research methods. It is important to note that we do not discuss all issues related to diversity or multicultural concerns and research. Rather, we seek to introduce the topic by providing representative examples, which highlight the complexity involved in conducting research responsibly—particularly research that involves diverse populations. Moreover, much of what we discuss in each section below describes research focusing on differences between groups (e.g., differences between two cultures). However, we would like to highlight that this does not negate the need for research examining the intersectionality of diverse identities or the inclusion of diverse populations in non-diversity focused research. It is important that researchers endeavor to be more inclusive of diverse populations in all of their work.

# Validity

Variability and diversity represent key elements of humanity. Yet, much of psychology appears to follow the Constitutional belief that "All men are created equal," often with the focus being on men, particularly White men. Historically within psychology, there has been a belief that research on a subset of the human population must be applicable to all of humanity around the globe. Certainly, psychology textbooks and journals are filled with psychological concepts, theories, and research findings that, at the surface, appear to be applicable to all humans. Yet, there is a great deal of cross-cultural as well as intra-cultural variability. According to Henrich et al. (2010), the population subset most often studied consists of samples from "WEIRD societies: Western, Educated, Industrialized, Rich, and Democratic" (p. 61).

The failure to include multicultural considerations and diverse populations as part of research can lead to faulty and harmful conclusions. Hall (2014) highlighted the important role of psychologists in advocating for the rights of marginalized and oppressed groups and political change. She stated, "Psychology was at the forefront of many of the political movements to make these changes, but at other times psychology actually supplied ammunition in the form of discriminatory research and theories of racial inferiority, misogyny, and homophobia" (p. 3). Unfortunately, although homogeneous samples may increase the internal validity of a study, it is often at the expense of the ability to generalize to a range of diverse populations. All of the above highlights concerns related to the topic of research validity, specifically construct, internal, and external validity.

# Construct Validity

Construct validity typically refers to the degree to which a variable has been operationally defined so that it captures the essence of a hypothetical construct under study. For example, does a particular depression scale adequately measure depression or is an IQ test a good measure of intelligence? If the answer is yes, the measure has good construct validity. If the answer is no, then any research conclusions drawn from the use of the measure are, at best, limited. An examination of construct validity is necessary in any study but involves unique concerns in cross-cultural or diversity research.

When conducting cross-cultural research, it is essential that experimenters monitor the degree to which their methodology is equivalent across cultures and groups. Although challenging, Matsumoto (2003) suggested that researchers should strive to create the perfect cross-cultural study. To that end, Brislin (2000) asserted that investigators need to develop an awareness of three sources of non-equivalence—translation, conceptual, and metric. Bravo (2003) highlighted three additional sources of nonequivalence: content, technical, and criterion.

Translation equivalence is necessary when conducting research on one population using experimental measures developed and standardized with another population. For example, if a researcher plans to use a standardized questionnaire developed in the U.S., translation equivalence needs to be achieved prior to its use in another country. So, how should the researcher go about translating a scale or experimental measure? According to the Guidelines for Research in Ethnic Minority Communities (Council of National Psychological Associations for the Advancement of Ethnic Minority Interests [CNPAAEMI], 2000), the proper translation of experimental measures involves the use of the back-translation method. First, a bilingual translator converts the measure to the target language. Next, a second translator converts the translated measure back to the original language. Finally, a researcher compares the original version to the back-translated version to examine any existing differences. The process is repeated until translation equivalence is achieved. However, more recent researchers have discussed the limitations of back-translation (Behr, 2017), recommending such enhanced techniques as professional translations accompanied by expert panel reviews (e.g., Colina, Marrone, Ingram, & Sánchez, 2017).

Conceptual equivalence is the degree to which theoretical concepts or constructs are the same between two cultures. Unfortunately, researchers can introduce conceptual nonequivalence in a variety of ways, even through something as seemingly innocuous as demographics. Although it is often useful to control for certain demographic variables such as age, sex, and religious orientation, this may become problematic when conducting cross-cultural research. For example, a demographic question such as "age" would seem relatively innocuous. Yet, for the !Kung of the Kalahari, this would not be a useful question. The !Kung use a culturally specific age categorization system, which focuses on an individual's physical abilities and functions within the community—age in terms of numbers is meaningless (Settersten & Hagestad, 2015). Additionally, researchers need to use care with specific items on questionnaires to ensure that these focused items have semantic equivalency—the same meaning across cultures (Bernal, Cumba-Avilés, & Rodriguez-Quintana, 2014). The issue of conceptual equivalence becomes much more complex when including broader concepts and when specific words or ideas have no equivalence in another culture.

Finally, researchers need to be concerned with metric equivalence—the ability to compare the specific scores on a scale of interest across cultures. For example, would a researcher interpret a score of 25 on the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) the same way across cultures? Would individuals living under repressive regimes, where government intrusion is a daily occurrence, score differently on the paranoia scale of the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher et al., 2001)? Additionally, metric equivalence may not exist within a culture when studying diverse populations. For example, measures of assessment used in research, particularly those related to personality assessment and

psychopathology, have rarely been standardized for use with a disabled population (Elliott & Umlauf, 1995; Pullin, 2002). In addition, individuals with disability may score differently than others on the Hypochondriasis Scale of the MMPI-2 (Butcher et al., 2001), with seeming obsession over body functions. Varying cultural norms about time, differences in physical ability, and age may all affect completion of timed tests of intellectual ability.

Measures that have been inadequately standardized and lack a representative normative group threaten construct validity by introducing the possibility that individuals are being evaluated on performance as opposed to ability. Unfortunately, researchers rarely design studies to accommodate participants who are differently-abled. Tasks designed to measure cognitive, personality, or other psychological abilities may instead be measuring primarily noncognitive or nonpsychological variables in research inclusive of participants with a range of abilities. For example, research on memory using computers to present stimuli may be more challenging for some older adults due to an increased incidence in susceptibility to glare from cataracts. Research participants of any age who are in ill health may fatigue more easily and perform poorly on outcome measures. Thus, differences found between participants may reflect visual or health differences as opposed to memory differences. Unless the researcher takes into account the impact of disability, age, or other factors, the resulting research conclusions may be biased and inaccurate.

Even if a study achieves equivalence on the three criteria above, Bravo (2003) argued that researchers should be concerned about three additional forms of non-equivalence. First, content equivalence addresses the issue of whether the content of a measure is relevant to individuals in all cultures being studied. Chi (2011) argued that researchers should ensure that questions are in fact meaningful for each culture. For example, researchers creating a measure of aging need to take into account the cultural background of participants. Chi noted that participants in individualistic cultures would understand a question regarding the need to maintain self-sufficiency as one ages. However, this question will not be meaningful to participants from a more collectivistic culture. Second, measures in a study should have technical equivalence. For example, the formatting of the instrument and/or the method of administration must not only be the same but also be perceived equivalently across cultures. Third, the research process must involve criterion equivalence, meaning that the outcomes of measures are evaluated using the established norms within a culture.

The inclusion of an international multicultural research team composed of an indigenous investigator or collaborator may serve to increase the validity of cross-cultural research as this inclusion can better enable the research team to ask the right questions and reach agreement when reporting findings and interpretations (Chi, 2011; CNPAAEMI, 2000; Friedemann, Pagan-Coss, & Mayorga, 2008).

## Internal Validity

Internal validity reflects the confidence with which we can draw cause and effect conclusions from our research results. Of primary concern for researchers is the ability to eliminate, minimize or hold constant all extraneous or confounding variables. Unfortunately, research examining differences between various elements of diversity (e.g., gender, culture) is by its very nature quasi-experimental and, hence, limited in relation to cause and effect conclusions. Indeed, this issue may contribute to the paucity of diversity research within psychology. In a provocative article, Chang and Sue (2005) suggested that the current scientific paradigm, with its focus on experimental designs, has introduced a bias in psychology. Specifically, the authors asserted that mainstream journals systematically exclude multicultural research, thus devaluing existing multicultural research and impeding the growth of research in this area. Ideally, experimental research should be high in both internal validity and external validity. Unfortunately, it is very difficult to achieve both in experimental design and extremely problematic when using alternative designs (e.g., quasi-experimental, correlational, observational, ethnographic). Chang and Sue argued that the importance psychologists have placed on determining causality has led researchers to value internal validity over external validity. Sadly, the idea that internal validity is primary to external validity continues to limit multicultural research (Bernal et al., 2014).

Chang and Sue (2005) further asserted that the emphasis psychology places on causality has led to a host of additional research problems, which only serve to devalue external validity and the very nature of multicultural research. The problems they discussed included: (a) overuse of college students as research participants, (b) willingness to assume research conducted on one population (e.g., White, middle-class, U.S. citizens) can be generalized to other groups or contexts, (c) disregard for research seeking to explore cross-cultural differences as opposed to explaining such differences, (d) the tendency of journal reviewers to insist that researchers add a White control group when conducting research on ethnic minority groups, and (e) the formation of aggregate non-White populations to obtain a large enough sample size. The latter issue is especially problematic due to the implied assumption of homogeneity among the non-White population. Although the exclusion of diverse participants may enhance internal validity, the resultant homogeneous sample does not reflect the diversity of human experience.

## **External Validity**

External validity is the degree to which research results can be generalized beyond one's sample. Traditionally, psychology focuses on the universality of human cognition and behavior. Researchers often refer to these universal concepts as etics.

Concepts thought to be specific to a particular culture are called emics. Matsumoto (2000) suggested that, "most cross-cultural psychologists would agree that there are just as many, if not more, emics as there are etics" (p. 5). In many psychology texts, traditional descriptions and recommended treatments for posttraumatic stress disorder (PTSD) are presented as universal or etics. Yet, PTSD symptoms are frequently culture-specific (Atlani & Rousseau, 2000; Bracken, 1998) and the use of traditional Western approaches may be ineffective with marginalized populations (Comas-Díaz, 2000), differing cultural backgrounds (Kira, 2010), or immigrants or refugees (Qureshi, Bagué, Ghali, & Collazos, 2015). The primary lesson of external validity is that researchers should exercise great care when extrapolating beyond their sample and this is particularly true when conducting cross-cultural or diversity research.

One of the primary issues at the core of external validity in relation to cross-cultural research is that variability exists within cultures. For example, the *Guidelines for Research in Ethnic Minority Communities* (CNPAAEMI, 2000) stated that above all else, researchers need to be aware of diversity within broad categories such as Asian Americans, Latinos, and American Indians, to name a few. These broadly defined groups vary with respect to acculturation, language, race/ethnicity, beliefs, socioeconomic status, and educational background. Indeed, they do not represent homogenous cultures (Bernal et al., 2014). All of these issues need to be considered when critiquing research involving these broadly defined groups. In addition to research design concerns, investigators need to be prepared for small sample sizes—particularly with American Indians. In fact, researchers may end up dealing with a single and consequently small population, given the fact that there are over 573 tribes within the United States and each tribe is a distinct cultural entity (Bureau of Indian Affairs, 2018).

The issue of external validity also applies to diversity research within cultures. For example, Eichler (1991) cited the problem of overgeneralization in gender research—the propensity to extend concepts, theories, and research developed from research involving participants of one gender to all individuals. Examples of overgeneralization ranged from the use of sexist language to the tendency of researchers to generalize the results of a study to all individuals when in fact the initial sample was composed only of men. The assumption that research done on men also applies to women is particularly problematic in areas such as health care research, as gender bias may lead to inappropriate or harmful treatments (Morgan, Williams, & Gott, 2017; Ruiz-Cantero et al., 2007). Hyde (2004) also asserted that researchers often employ a "female deficit model" when drawing conclusions—the tendency to frame the results in such a fashion that women's behavior is seen as deficient or non-normative. This issue may be magnified when conducting research in highly patriarchal cultures. Similar external validity concerns exist when researchers fail to consider individuals along the gender spectrum or with differing sexual orientations (Hughes, Damin, & Heiden-Rootes, 2017).

# **Methodological Design Concerns**

Many of the concerns discussed under validity intersect with methodological design concerns. However, several topics deserve further discussion and include methodological concerns related to demographics and sampling, experimenter bias, and the use of quasi-experimental design.

#### Demographics and Sampling

At first glance, the issue of demographics and sampling may appear to be simple. However, when one includes diverse populations or is studying diversity both between and within cultures, these concerns are highly complex and require careful thought and foresight. Some of the major issues affecting demographics and sampling involve: (a) self-identification; (b) hidden populations; (c) exclusion; and (d) faulty biologically-based conclusions. All of these issues are influenced by experimenter preconceptions about groups and cultures.

When conducting research, it is important to use culturally relevant and appropriate demographic categories regardless whether the research involves participants within or between cultures. For example, if you are conducting cross-cultural research, is it more appropriate to use the word "Hispanic" or "Latino/a"? Should you use a broad category such as Asian or does one need to be more specific: "Japanese," "Chinese," "Hmong," or "Karen" (noting that this listing represents just a tiny fraction of the various ethnicities/cultures often lumped together under the term "Asian")?

The more precise you are in identifying your sample, the better the external validity and the more likely your results can be replicated. For example, relying on a broad term such as Asian-American can result in the researcher using a sample of convenience which over-represents one group (e.g., young Chinese women who are college students) over another group (e.g., older, community-dwelling Thai men). Any significant results will be specific to the sample used and cannot be extended to all Asian-Americans. The reason is simple. According to Bernal et al. (2014) using a broad ethnocultural population (e.g., Asian-American) groups together people who may in fact differ on a host of variables such as level of acculturation, type of family structure, and likelihood of discrimination, as well as religious, political, economic differences, or other factors. Familiarity with the culture, including diversity within the culture under study and other points of intersection (e.g., ethnic groups, language, religion), is essential to avoid bias and stereotypes on the part of the experimenter.

The issue of self-identification applies not just to cultural differences but also variations within cultures, such as gender and sexual orientation. The term "homosexuality" often has been eschewed by gays and lesbians because "homosexuality"

has historically been associated with disease and mental illness (GLAAD, 2016). In their media reference guide, GLAAD suggested the media avoid using the term "homosexual" and instead use gay or lesbian to refer to individuals attracted to members of the same sex. Today, some are electing to use "queer" as a more inclusive term replacing gay and lesbian and inclusive of bisexuals and transgendered individuals—although this term not universally accepted within the spectrum of communities representing individuals who identify with varying gender identities and sexual orientations (GLAAD, 2016; Grace, Hill, Johnson, & Lewis, 2004). Moreover, it is not uncommon to see the following acronym—LGBTQIA (lesbian, gay, bisexual, transgendered or transsexual, queer or questioning, intersex, asexual) used within the U.S. Even more challenging, from a research perspective, is the fact that some individuals who have had same-sex sexual relationships may still self-identify as heterosexual (Savin-Williams, 2001) and transgendered or intersex (biological sex is ambiguous) individuals may identify as male, female, or another gender. According to GLAAD (2016), individuals may identify as gender non-conforming (people whose gender expression is different from conventional expectations of masculinity and femininity) or as non-binary and/or genderqueer (people who experience their gender identity and/or gender expression as falling outside the categories of man and woman).

This ambiguity and interplay among all these constructs make simple, non-fluid gender and sexual orientation self-identification more ambiguous. Certainly, the juxtaposition of identity issues and the need for demographics create the basis for problematic research hypotheses and sampling challenges. Nonetheless, researchers should avoid overly simplistic categorizations for the sake of expediency as this may introduce a source of bias into a research project.

Around the globe, many groups are hidden from view due to cultural, religious, or legal strictures. For example, in some cultures, adultery may result in honor killings, identification as LGBTQIA is punishable by death or banishment, and certain religious groups face imprisonment. Therefore, these populations often remain hidden as a matter of safety and in attempts to avoid oppression. Efforts to include and study such populations are thus difficult.

Attitudes concerning the subject of sexual orientation have undergone significant change in the past 20 years. According to recent Gallup Polls (McCarthy, 2016), Americans have become increasingly more accepting of gays and lesbians. For example, in 2016, 60% of Americans said they were satisfied with the acceptance of gays and lesbians. Only 10% of respondents wanted less acceptance. As recently as 2006, satisfaction was only 32%. Similarly, a big shift has occurred in openness to same sex marriage. According to Gallup Polls (McCarthy, 2018), acceptance of same sex marriage is up 40 percentage points, from 27% in 1996 to 67% in 2018.

Despite these changing attitudes, there is little published evidence that research inclusive of or concerning sexual orientation has increased in size and scope since Bowman's (2003) research. Much of what is being published is still just a small fraction of the overall literature and largely remains relegated to specialized journals

or special issues of journals. In addition, many individuals may still be reticent to self-identify as lesbian, gay, or bisexual due to fears concerning confidentiality or internalized homophobia. These fears are particularly acute among LGBTQIA individuals of color. Huang et al. (2010) conducted a content analysis of the literature surrounding lesbian/gay/bisexual LGB individuals of color and found that the amount of research over a 10-year period had increased. However, the researchers noted that the existing research had significant areas not covered, missing subpopulations, and a lack of rigorous methodological approaches. Essentially, the majority of LGBTQIA research is still limited to a very select group of the population who self-identify as non-conforming gender identities or sexual orientations—typically White, formally educated, urban, and upper middle class.

In response to the challenges associated with obtaining a representative sample, researchers are currently exploring new methodologies using online data harvested from crowdsourcing websites (e.g., Amazon's Mechanical Turk), mobile phone apps (Boase, 2013), Twitter (Murphy, 2017), and web-based surveys (e.g., Social Psychology Network). Unfortunately, as popular as these approaches are becoming, there is still concern that these data overly represent participants from societies that are Western, educated, industrialized, rich, and democratic (WEIRD; Henrich et al., 2010).

It is important to note that this discussion reflects just one instance of the difficulty of sampling from hidden populations. Researchers studying any number of populations (e.g., the mentally ill or minority religions) that are not immediately identifiable based on some external characteristic, but that belong to a class of individuals socially stigmatized because of group status, will experience difficulties, particularly with regard to sampling.

Unfortunately, researchers often exclude individuals, both intentionally and unintentionally, from research participation based on a variety of factors. Such factors include, but are not limited to, the ability to get to the site of the research, literacy, gender, language, political oppression, socio-economic status, religious affiliation, and disability. Such exclusions limit the generalizability of the research. The pool of available participants may be limited if participants are unable to read a questionnaire, lack the means to travel to the research site, or fear governmental reprisals for taking part in a research study. Consequently, those who become involved in the research may be different than those individuals who do not elect to or cannot participate.

Individuals with disabilities are often systematically excluded from research both in the U.S. and abroad. According to the World Bank (2018), one billion people, or at least 15% of the world's population, experience some form of disability. Approximately 110 million to 190 million people worldwide experience significant disabilities. Based on the 2010 U.S. Census, approximately 56.7 million Americans are living with some kind of disability (Brault, 2012). Types of disability are broadly defined in the U.S. to include sensory, physical, mental, self-care, homebound, and employment categories. Disabilities can be visible or hidden (e.g., heart defect),

and individuals may or may not define themselves as disabled depending on the degree of limitation the disability creates in their lives. Nonetheless, some investigators fail to accommodate disabled participants, thereby systematically excluding them from research. Other researchers simply bar individuals with disabilities from research participation altogether, often as the result of experimenter bias—the assumption that disability has broad effects on cognition, personality, affect, or ability. Of course, this assumption is grounded largely in stereotype rather than reality (Dunn, 2000).

The five ethnic minority associations that compose the CNPAAEMI worked collaboratively to create the *Guidelines for Research in Ethnic Minority Communities* (2000). The *Guidelines* provided a wealth of information concerning research with ethnically diverse populations, with an important caveat. The CNPAAEMI warned that it is important for researchers to take care when using race as a demographic category, lest the variable become a proxy for biological explanations of behavior (Wang & Sue, 2005). Similar concerns surround the use of gender in psychological research. For example, McHugh and Cosgrove (2002) suggested that by attributing differences in men and women to gender differences "we risk essentializing gender, promoting a view of women as a homogenous group, and reinforcing the very mechanisms of oppression against which we are fighting" (p. 13) and note that the use of only "male/men" or "female/women" as categorical terms is exclusionary of those who identify as transsexual, transgender, or intersex.

Certainly, race and gender as variables are focal social and cultural constructs that, if used judiciously, can provide a wealth of information. The *Guidelines for Research in Ethnic Minority Communities* invited researchers to learn more about the rich diversity among individuals defined as belonging to a particular race and avoid treating racial categories as homogenous groups. They also recommended that researchers avoid non-representative, but perhaps easy-to-reach samples. For example, it may be easy to conduct research on adolescents abroad who attend a private English-speaking boarding school, but this population may not be representative of the majority population in that country.

#### **Experimenter Bias**

In addition to its influence on participant demographics and samples, experimenter bias can also affect the nature of an investigator's worldview and subsequent research hypotheses. For any cross-cultural study, researchers must be familiar with all aspects (e.g., language, religion, kinship patterns) of the societies studied. Without such knowledge, any research questions, methods, and conclusions may be biased and untrustworthy. Moreover, it is imperative that researchers take into consideration the role of other diversity concerns within that culture as well. For example, research around the globe may be affected by what Eichler (1991) termed androcentricity—the tendency for researchers to view the world from a male

perspective. The research process perpetuates androcentrism in many ways. In an influential article, Denmark, Russo, Frieze, and Sechzer (1988) discussed several examples of sexism in research. For instance, the authors discussed the tendency for researchers to examine concepts such as leadership style in a fashion that emphasizes male stereotypes (e.g., dominance, aggression) versus a range of leadership styles, including those that are more egalitarian. Another example cited by Denmark and colleagues involved the propensity for some researchers to assume that topics relevant to White males are inherently more important than issues related to other groups. Binion (2006) argued that women's human rights (e.g., marital rape and other forms of domestic abuse) have traditionally been viewed as existing within the private sphere of the home, outside of public view, and hence often ignored. The false dichotomy of public/private spheres has unfortunately negatively influenced the actions of communities and law enforcement, and has limited political asylum opportunities for women around the globe. However, the tide may be turning. The "Me Too" movement (founded in 2006) became a global phenomenon in 2017. The goal of the movement is to "reframe and expand the global conversation around sexual violence to speak to the needs of a broader spectrum of survivors" (Me Too Movement, 2018).

Experimenter bias has also influenced the conclusions reached by researchers studying disability both within and outside the United States. According to Dunn (2000), "Insiders (people with disabilities) know what disability is like, whereas outsiders (people without disabilities) make assumptions, including erroneous ones, about it" (p. 574). Most notably, nondisabled individuals overestimate the effect of a disability on an individual's capacities and well-being. In addition, researchers explicitly studying participants with known disabilities may fail to consider all possible alternative explanations, such as cultural, situational, or interpersonal factors, rather than simply attributing the results to the disability. For example, researchers comparing math scores among disabled and non-disabled populations need to take into account the role of stereotype threat (Steele, Spencer, & Aronson, 2002) when discussing any performance differences between the groups.

# Designs

Typically, research examining cross-cultural differences or focusing on diversity-related variables such as gender, age, or sexual orientation employs quasi-experimental designs. A researcher examining differences in age may compare younger and older adults or a cross-cultural psychologist may research differences between ethnic groups either within or across nations. Unfortunately, the use of distinct samples in quasi-experimental designs typically results in low internal validity. These samples may differ on any number of variables other than the one under investigation. In a cross-sectional study (i.e., two or more age groups are compared), age differences may be confounded with generational, non-shared cultural, or historical

cohort experiences—making it impossible to determine causality. For example, early cross-sectional studies suggested progressive declines in intelligence following late adolescence and early young adulthood. This gloomy picture was not supported by research when cohort effects (e.g., differences in educational levels) were taken into account (Schaie, 1986, 2000).

Similarly, comparisons of ethnic groups or race within a culture may be confounded by differences in religion, language, socio-economic status, or other factors not under study by the researchers. Unfortunately, investigators may assume differences in heredity or genetics to explain the results of cross-cultural studies or those involving race or ethnicity. This faulty assumption can lead to erroneous and potentially damaging conclusions. For example, throughout the twentieth century some researchers were still asserting that White Americans were intellectually superior to minority groups—specifically African-Americans (e.g., Hernstein & Murray, 1994; Jensen, 1969). However, Sternberg, Grigorenko, and Kidd (2005) noted, "Race is a social construction, not a biological construct, and studies currently indicating alleged genetic bases of racial differences in intelligence fail to make their point even for these social defined groups" (p. 57).

Meta-analyses have become an increasingly popular tool for psychologists. For example, a search of PsycInfo© revealed dozens of meta-analyses examining gender as well as cultural differences across a variety of issues. Although meta-analyses have almost certainly added to psychologists' knowledge of humanity, researchers need to exercise caution when drawing conclusions from such studies. For example, in relation to gender, Halpern (1995) expressed concern that researchers ignore context when using benchmarks to determine whether a gender-related effect size is meaningful or important. The tendency to ignore context is compounded by the fact that gender research often fails to use representative samples. Halpern cautioned that "as long as the research literature is based on a narrow selection of participants and assessment procedures, the results of any analysis will be biased" (p. 83).

#### **Research Ethics**

The APA's publication *Ethical Principles of Psychologists and Code of Conduct* (2017a) highlights a range of research ethics topics such as confidentiality, informed consent, the use of deception, and the obligation to be accurate in reporting results. Moreover, according to the *Ethical Principles*, all psychologists must "strive to benefit those with whom they work and take care to do no harm" (General Principle A). Although all of these concerns are fundamental to psychological research, issues of informed consent and confidentiality are especially important in crosscultural research, particularly in relation to protection from harm.

In addition, according to the *Ethical Principles*, researchers conducting any project must inform participants about a variety of features such as purpose, procedures, risks and benefits, the limits of confidentiality, and the right to withdraw from

participation. As with all statements of informed consent, it is essential that the document be clear and unambiguous—this is particularly important in cross-cultural research. Consent forms must be developed with an understanding of the culture of participants in mind, inclusive of special needs related to language, reading ability, nation-specific legal standards, and cultural norms. Consequently, a "boiler plate" statement simply translated into a different language often does not meet the standards of informed consent. Moreover, in some cultures, women may not be culturally free to give informed consent but must first receive the consent of a male guardian.

Individuals with developmental or cognitive disabilities represent a challenge to informed consent (Dresser, 2001). Informed consent rests on the premise that research participants can fully understand the procedures, risks, and benefits associated with a particular study and agree to participate. Unfortunately, individuals with significant cognitive impairment due to developmental disabilities, injury, or dementia may not fully understand the material provided to obtain informed consent. Researchers must take special care to protect participants who are unable to provide consent on their own, including situations where a guardian provides consent but the participants undergo experimental testing without their knowledge. Unfortunately, due to the potential risks involved, however, many researchers simply avoid research with cognitively disabled populations (Yan & Munir, 2004).

Researchers need to be particularly aware of issues of confidentiality when conducting cross-cultural research. Seltzer and Anderson (2001) noted that researchers should use care even with aggregated data, as some individuals or small groups may remain identifiable. Within this discussion, they highlighted the role that official statistics have played in historical incidents of forced migration, internment, and genocide. The United Nations Statistical Commission (UNSC, 2013) passed the Fundamental Principles of Official Statistics, which stated, "Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation" (Principle 1). Nonetheless, the UNSC asserted that researchers must protect individuals' privacy and guard against the misuse of statistics. It is clear that researchers must carefully protect the confidentiality of all participants (e.g., including no easily identifiable information about the participants on forms, questionnaires, etc.) in cultures where the researcher's data may be taken by family members, religious officials, or governmental agents for use against the well-being of the participant.

#### Conclusion

Increasingly, we hear that we are living within a global community. If this is to be a true and inclusive statement, then research needs to reflect the tapestry of human existence, noting variations across a range of biological and social constructs (e.g., sex and race, respectively) and cultures. In this chapter, we have

discussed a host of constructs such as gender and race but this does not represent the full spectrum of human expression. Other areas of diversity significantly affecting individuals' identities and their place in communities include, but are by no means limited to, socio-economic status, linguistic variability, educational level, differing sects within religious groups, profession, marital status, physical and mental health, social class/caste, computer literacy, access to resources, political affiliation, and physical appearance. Ultimately, how we identify ourselves is incredibly variable and influenced by the currents of time, our communities, and our culture.

To become an effective and critical consumer and producer of research today requires cross-cultural and diversity-related understanding, knowledge, and skills. Individuals need to expand their horizons by reading research from around the globe, on a variety of topics and perhaps inclusive of research from related fields such as sociology, anthropology, history, and international studies. It is important to think of psychological research not so much as a template through which all topics can be studied (e.g., independent/dependent variables; experimental/control groups) but as a flexible tool that can be used creatively to explore topics of relevance across a range of populations and communities. With an awareness of alternate methodologies, input from collaborators with varying backgrounds, and an understanding of the unique ethical concerns involved in cross-cultural research, individuals can engage in exciting and important research that is both inclusive and reflective of human diversity across the global community.

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# Evolution and Cross-Cultural Psychology

#### Afshin Gharib

Darwin's modern readers of the world-changing *The Origin of Species* (1859/1958), where he outlined his theory of evolution through natural selection, are surprised to find, among all the detailed evidence that Darwin lays out for his theory, no mention of evolutionary changes in humans. After over 400 pages of detailed evidence for natural selection in plants and non-human animals, it is not until the very last pages of the book that Darwin predicts:

 $\dots$  I see open fields for far more important researches. Psychology will be securely based on the foundation  $\dots$  of the necessary acquirement of each mental power and capacity by gradation. Much light will be thrown on the origins of man and his history. (Darwin, 1859/1958, p. 449)

Since Darwin's time, a great deal of research in psychology and other disciplines has shown Darwin to be correct. In fact, evolutionary theory does illuminate a number of mysteries about human life, and the growing discipline of evolutionary psychology seeks to use Darwinian principles to better understand human psychology and behavior.

Darwin's great insight into the process underlying much evolutionary change was that, in every population of organisms, you will find variations among individuals in heritable traits—some individuals are taller, faster, or stronger than others and can pass on these traits to their offspring. In different environments, different heritable traits are advantageous and improve chances of survival and successful reproduction (different traits make you successful at surviving in a swamp compared to a desert), which leads to particular traits becoming more common in that population over the course of many generations. Over time,

populations in different environments diverge from each other as certain traits become more common in one environment, and other traits become more common in another. Given that human beings live in more varied environments than most other organisms on Earth, it would be surprising if this process of natural selection had not left its mark on our species. In this chapter, we will consider how cross-cultural research can address a number of issues related to human evolution, both in terms of genetic and cultural evolution. Studies of differences in psychological and physiological processes between human groups can lead to insights about how humans have been subject to various evolutionary pressures, leading to different adaptations due to living in different environments. Cross-cultural research can both show where human psychological processes are culturally specific, leading to questions about why different populations may have evolved different adaptations, and how people of different cultures are largely the same in certain traits, suggesting species-wide adaptations to common challenges.

#### **Natural Selection in Humans**

One way a species can adapt to a new environment is through the process of natural selection acting on genetic variation—in cold climates, genetic variations that lead to more insulating fat and thicker fur for warmth would be selected for, in a hot climate those same traits would be selected against, and over many generations this could lead to the differences in physical traits between Arctic and equatorial species. Another way that a species, particularly a large-brained and long-lived species like humans, could adapt to a new environment is by developing new technologies and tools—knowledge that can be passed on from individual to individual and generation to generation, modified and improved upon, leading to populations that have the problem-solving skills needed to survive in a particular environment. This sort of cultural evolution may have been just as important in human history as genetic evolution (Henrich, 2016).

As an example of natural selection acting on genetic variability in humans, there is evidence that as humans spread from equatorial Africa to higher latitudes in Europe and Asia natural selection acting on genetic variation led to various changes in the physiology of human populations. In equatorial regions, human skin is darkly pigmented due to the production of melanin in skin cells. This pigmentation protects skin from ultraviolet radiation. Ultraviolet radiation is dangerous not only because of the increased risk of melanomas, but also because it depletes the body of the B vitamin folate (Jablonski, 2012). Folate deficiency can lead to various health problems, including central nervous system abnormalities in offspring. As a result, it would make sense for dark pigmentation to become more common in equatorial regions in a species that lacks protective hair covering over much of its body. At higher latitudes, however, the challenge is to cope with the low levels of

ultraviolet radiation. Ultraviolet radiation is necessary for humans to synthesize vitamin D, needed for calcium absorption (Loomis, 1967). Insufficient calcium absorption can lead to a variety of health problems, including rickets, a deformity of developing bones (Loomis, 1970). While ultraviolet radiation at the equator is strong enough for vitamin D production even in darkly pigmented skin, at higher latitudes, the weak ultraviolet light would pose a serious health problem. As a result, natural selection led to the spread of genetic variants for less skin pigmentation in human populations living in higher latitudes in both Europe and Asia (Jablonski & Chaplin, 2016).

The example of variations in skin pigmentation shows that human populations have been subject to genetic selection and this process of selection has contributed to our species' success in spreading across the planet. A second way that humans may adapt to life in different environments is by developing cultural traditions. For example, life in the cold climates of higher latitudes would have been very difficult for a species that evolved in equatorial Africa, regardless of its skin color, if that species did not have the knowledge of manufacturing warm clothing and fire, protective shelters, weapons and tools to hunt and trap local animals, knowledge of which foods to eat and which toxins to avoid, and countless other pieces of knowledge that humans acquire from each other through cultural transmission (Henrich, 2016). Without that cultural knowledge allowing for groups of humans to survive in the cold, generation after generation, the process of natural selection would not have had the time to select for advantageous genetic variations for high latitudes.

Another example of how cultural practices can influence genetic evolution may be the case of the "thrifty gene" among people of Polynesian descent. The ancestors of modern Polynesians colonized the South Pacific islands in a series of migrations from the Asian mainland. This colonization involved long sea voyages between islands sometimes hundreds of miles apart, voyages often characterized by periods of malnutrition and starvation while at sea for extended periods in open canoes. Those ancestors of the modern Polynesians who had more efficient metabolisms, able to absorb more nutrients and store more fat for periods of food shortage, would have been more likely to survive these voyages and to leave descendants on islands throughout the South Pacific. As a result, the "thrifty" metabolism trait is widespread in these populations. As suggested by Neel (1962), part of this thrifty genetic makeup includes more rapid release of insulin, leading to faster absorption of sugar. In modern societies where food is plentiful, this thrifty metabolism is responsible for higher rates of type 2 diabetes in these populations.

The case of the thrifty gene is an interesting example of the interaction between evolutionary selection acting on genes, and cultural practices. When food is scarce, for example as a consequence of living in a seafaring culture, an efficient metabolism is an evolutionary advantage and thrifty genes are selected for. This means that populations that have faced repeated periods of food scarcity will have high rates of this trait (Diamond, 2003). In other environments, where food shortages

are rare, the same trait becomes a liability. This can be seen, for example, among the Pima of Southwestern United States and Mexico. The Pima are a Native American group that lives in two different countries; one group of Pima lives in Mexico, a second closely related group lives across the border in the United States. In the United States, living the typical American sedentary lifestyle with easy access to calories, the Pima have high rates of obesity, type 2 diabetes, and kidney disease. In Mexico, relying on a more traditional diet and lifestyle, the Pima have much lower rates of these disorders (Valencia et al., 2005). Cultural practices can make a trait evolutionarily adaptive and selected for by natural selection, while in different cultures, the same trait can become maladaptive.

#### **Cross-Cultural Evidence for Natural Selection in Humans**

One interesting illustrative example of the interaction of culture and natural selection can be seen in the ways that human populations have adapted to surviving at high altitudes. Cross-cultural comparisons, comparing people who live at high altitudes to low altitude populations, reveal that high altitude may have been a source of natural selection in some human populations. Around the world, groups of humans have colonized and survived in mountainous regions. For example, humans seem to have arrived in the Tibetan plateau in the Himalayan mountains around 25,000 years ago. Much later, around 10,000 years ago, humans also colonized the Andes mountains of South America (although not all experts agree with these timelines; see Beall, 2000, for a further discussion). Without a doubt, culturally transmitted information has been crucial in the success of these populations at high altitude. The cultural innovations that help humans cope with such environments include construction of warm and insulated clothing and shelter, domestication of local animal species such as yaks in the Himalayas, and use of the coca leaf to mitigate the effects of altitude sickness in the Andes.

There is also evidence that over the thousands of years that Tibetan and Andean populations have been living at high altitude, these groups have evolved specific genetic adaptations that help them cope with the challenges of living with low oxygen levels. No technological advance prior to the invention of oxygen tanks would have allowed for an early group of colonizers to adapt to the problem of low oxygen levels. People from low-elevation populations who visit Tibet or the high Andes usually have to cope with the negative consequences of finding themselves in a low-oxygen environment, including the unpleasant effects of altitude sickness. At an altitude of 13,000 ft, each breath of air contains only 60% of the oxygen a breath would contain at sea level (Beall, 2000). With less oxygen intake with each breath, less oxygen is delivered to cells and with less oxygen, the cells' ability to produce energy declines. Even people who move to high altitudes and live there for long periods of time, such as lowland Han Chinese who move to

Tibet, are easily fatigued in their new homeland and have to cope with the effects of altitude sickness even after years of living side by side with native Tibetans who do not show the same adverse effects. The same is true of indigenous people of the Andes compared to low-altitude transplants.

The cost of living at high altitudes for people from lowland populations is evolutionarily significant, as both lowland Han Chinese who move to Tibet and people of European descent who live in the high Andes have lower rates of reproduction and lower birth weights compared to indigenous peoples (Beall et al., 2010). Han Chinese who have moved to Tibet have infant mortality rates three times as high as indigenous Tibetans (Beall et al., 2010). Cross-cultural comparisons of Tibetans and Andeans, and comparisons of both groups with populations from low altitude who have moved to and live at high altitudes, suggest that each population—indigenous Tibetans and indigenous groups in the Andes—has evolved unique genetic adaptations to deal with the adverse effects of life at high altitude. When people from low-altitude populations first ascend to high altitude, one response to the low levels of oxygen is to hyperventilate, breathing more rapidly to get more oxygen into the bloodstream. While this response allows for more oxygen to be delivered to cells, it is metabolically costly and tends to occur for only a short time in people from low-altitude populations after arriving at high altitudes (Beall, 2007).

Over the long term, other physiological changes that help the climber adapt include increasing the production of red blood cells, which increases the capacity of the blood to carry oxygen. The limits of such acclimatization can be seen in the way that people from low altitudes easily suffer fatigue in high altitudes, and the fact that they face the potential risk of chronic altitude sickness even after living at high altitudes for long periods of time. Indigenous populations from high altitudes are able to maintain high oxygen delivery to cells without the high metabolic cost and with lower risk of chronic altitude sickness. Ethnic Tibetans and the indigenous people of the Andes, whose ancestors have been living at high altitudes for many generations, exhibit various genetic adaptations that allow them to thrive at an altitude that significantly reduces other people's chances of survival and reproduction.

Interestingly, there is evidence that Tibetans and Andeans have evolved different genetic adaptations to life at high altitudes and different traits have been selected for in these two populations. Beall (2000, 2007) compared native Tibetans and ethnic Aymara from the highlands of Bolivia on a variety of traits that may be adaptive at high altitudes. The two populations show a variety of differences in their adaptations. For example, Tibetans but not Aymara show lifelong high resting breathing rates. In lowland populations, an increase in breathing rate is an immediate response to low oxygen environment, but that response lasts only a week or two during the process of acclimatization to high altitude, as a higher respiration rate is metabolically expensive. In Tibetans, but not in Andeans, increased respiration happens without an increase in metabolism and is sustained permanently at high altitudes. A second difference between the two high altitude populations is

that Tibetans tend to have lower levels of hemoglobin in their blood. In people from low-altitude populations who visit high altitudes, one feature of acclimatization to high elevations is an increased production of hemoglobin which allows for more oxygen to be carried in the blood. At the same time, the increased viscosity of blood is one of the causes of altitude sickness. Tibetans produce much lower levels of hemoglobin at high altitudes and this is one factor that protects them from altitude sickness. At the same time, their cells are not oxygen-deprived and their metabolism rate is normal. In the Aymara of the Andes, there is a permanent increase in hemoglobin production. While this trait has the benefit of increasing oxygen delivery to cells, there is also the associated risk of developing chronic mountain sickness as blood becomes more viscous. For Tibetans, the low levels of hemoglobin mean that they are relatively protected from altitude sickness compared to both the Aymara of the Andes and Han Chinese who live in Tibet (Beall, 2000; Beall et al., 2010).

Genetic comparisons of Tibetans with both low-altitude Han Chinese and Andeans point to a specific gene (EPAS1) being responsible for the production of hemoglobin at high altitudes and having been the target of natural selection among Tibetans (Beall et al., 2010). Several other genes have also been identified that may have been selected for in Tibetans for adaptation to high altitudes (Simonson et al., 2010; Yi et al., 2010). The change in frequency of the EPAS1 allele appears to be the fastest change in a human gene ever documented, attesting to the power of natural selection to develop adaptive traits (Yi et al., 2010). If the ancestors of modern Tibetans colonized high altitudes thousands of years before humans started to live in the Andes, natural selection has had a longer period to time to act on people in the Himalayas. There is evidence that, compared to the native people of the Andes, Tibetans are even better adapted to high altitude life. One of the risks of altitude sickness is pulmonary hypertension as the heart has to work harder to deliver oxygen to cells, and one physiological response to low oxygen levels in low-altitude populations is a constriction of blood vessels, which increases blood pressure. While indigenous populations in the Andes are at high risk of pulmonary hypertension, Tibetans are not, suggesting a genetic adaptation in Tibetans that is absent in Andean populations (Beall, 2007). Tibetans do not show the same vasoconstriction at high altitudes that is typical of low-altitude populations. One result of this is higher blood flow in Tibetans, which may be one of the reasons for their greater reproductive success at high altitude compared to Han Chinese transplants, since pregnant Tibetans have more blood flow to the placenta, leading to heavier birth weight in Tibetans compared to Han Chinese, and a greater chance of survival in infancy. It is important to keep in mind that without the culturally developed tools and techniques that allowed Tibetans to survive in the high plateau of the Himalayas for generations—as just one example, the domestication of yaks for use as food and clothing—natural selection would not have been able to select adaptive genetic variants among the original lowland populations who colonized the Tibetan plateau centuries ago.

The comparison of Tibetan, Andean, and low-altitude populations leads to important evidence for evolutionary change in human populations. Cross-cultural research is a way to uncover evidence for such evolutionary adaptions. In the case of high-altitude adaptations, cultural innovations first allowed humans to colonize high altitudes, and natural selection then selected for genes that conferred an advantage for survival and reproduction in that environment. Cultural practices can be an important way for humans to adapt to different environments.

# **Culture as Adaptation**

Charles Darwin, in his first major publication, The Voyage of the Beagle (1839/1962), described his many adventures and observations traveling around the world aboard the H. M. S. Beagle in the company of Captain Robert Fitzroy. This voyage would provide the experiences that would become the foundations of the revolutionary theory of natural selection that Darwin would publish some two decades later in The Origin of Species. One of the more interesting passages in The Voyage of the Beagle is Darwin's description of the Beagle's visit to Tierra del Fuego, at the tip of South America. Upon arriving to the island, Darwin expressed his surprise at seeing the indigenous people of Tierra del Fuego, apparently able to survive in the cold and unproductive environment without any of the technological aids that a Victorian European like Darwin would have considered necessities. With seemingly simple tools, people had been able to thrive in that hostile environment for generations. In an early hint of his developing evolutionary thinking, Darwin considered the possibility that the Fuegians had evolved instinctual behaviors that helped them survive; as he put it, "nature, by making habit omnipotent, and its effects hereditary, has fitted the Fuegian to the climate and the productions of his miserable country" (Darwin, 1962, p. 217).

One of the saddest events related by Darwin had to do with a group of Fuegians whom Captain Fitzroy had taken from the island several years before during an earlier voyage, had brought back to England for education, and was now returning to their native home. In England, the Fuegians had become celebrities, even meeting with the King of England. Now, these transplants faced the challenge of returning home. One of these individuals, a man named Jemmy Button by Fitzroy (sadly, the name was based on the price Fitzroy had paid to buy him—a single pearl button), had been a young boy when taken from his native island. Fitzroy wanted him to introduce his tribe members to European "civilization." He left Jemmy and the other Fuegians on the island along with a missionary, even though during his time in England Jemmy had largely forgotten his native language and the customs of his people. Darwin described how the young man was dropped off on Tierra del Fuego in a good location on a harbor, with a house and gardens prepared for him and the other transplanted Fuegians by the crew of the *Beagle* They were provided

with provisions, with the expectation that they would easily reintegrate back into the tribe and thrive in their native environment. In fact, while Jemmy eventually did become accepted back into his tribe and succeeded on Tierra del Fuego, the process was not an easy one. Even a year later, when the *Beagle* made a return visit, Darwin found Jemmy to be "a thin haggard savage with long disordered hair, and naked except for a bit of blanket around his waist ... we had left him plump, fat, clean and well dressed" (Darwin, 1962, p. 229). Over the course of that year Jemmy had been able to relearn some of his native language (and teach some English to some of his tribesmen) and he had learned some important survival skills such as how to make a canoe and his own spearheads and arrows, some of which he gave to Captain Fitzroy as a farewell gift. He had integrated back into his tribe well enough to have married, and chose to stay behind on his native island.

Darwin's description of Jemmy Button's struggles contains an important lesson, one that suggests that Darwin was wrong in ascribing the Fuegians' successful adaptation to Tierra de Fuego to hereditary traits. The ability of the natives of Tierra del Fuego to thrive on the barren island was not due to any hereditary genetic adaptation. If people had evolved to survive on Tierra del Fuego due to natural selection acting on their genes, Jemmy Button would be expected to be as successful in surviving when returned to his environment of evolutionary adaptation as any of his genetically related fellow tribesmen. That was clearly not the case. What Jemmy lacked upon his return was not genetic adaptation, but cultural knowledge. Over the course of the year that he spent gradually reintegrating back into his tribe, what he acquired was the knowledge to make necessary tools such as arrows and canoes, and how to speak the language of his tribe again. This acquired knowledge was ultimately what helped him survive his transition back to the harsh environment of his home.

Darwin's observations of Jemmy Button's struggles on Tierra del Fuego are just one example of how cultural knowledge is a key to survival for humans. Henrich (2016) and Richerson and Boyd (2005) described various examples of Western explorers in the nineteenth century who found themselves lost in inhospitable environments, such as the Arctic and the deserts of Australia. They perished due to lack of knowledge of how to find and process food sources or create adequate shelter. As Henrich and Richerson and Boyd pointed out, these Western explorers were unsuccessful in surviving in places where indigenous populations had been thriving for generations. What the explorers lacked was not the genetic make-up needed for survival, but sufficient cultural knowledge to exploit the local resources—knowledge that was passed on from generation to generation among local inhabitants and which could not have been acquired by trial and error by the foreign visitors.

One of the obvious signs of human success as a species is the variety of environments we have been able to colonize and survive in. Compared to other species, and certainly compared to our closest non-human relatives, humans are astonishingly diverse in terms of the environments we live in. While chimpanzees and

other apes never managed to move beyond the borders of equatorial rainforests, the human species spread from the savannahs of Africa, starting probably around 100,000 years ago to establish populations on every continent except Antarctica. In a few tens of thousands of years, humans spread to environments as diverse as the rainforests of the Amazon and the ice floes of the Arctic. What has made us such successful colonizers is partly our ability to learn from each other and to improve on the knowledge we acquire—the ability to create culture. At the same time, the spread of our species into all these different environmental niches, achieved thanks to our proclivity for cultural transmission, has created different selective pressures on different populations, resulting in what Durham (1991) has called gene-culture co-evolution. Culture both provides humans a way of adapting to new environments and creates novel environments for humans to adapt to. In other words, the human ability to develop cultural traditions is an evolutionary adaptation (Richerson & Boyd, 2005), allowing humans to live in a greater variety of environments than any other species, while at the same time sculpting the environment which natural selection acts within.

If we think of culture as the ability to learn novel behaviors and problem-solving techniques from other individuals, it is clear that other species seem to have rudiments of culture. Some song birds sing songs that vary by region, and young song birds acquire the song of their area by hearing local adults singing (Shettleworth, 1998). Rats and blue tits can learn novel ways of processing foods when exposed to individuals who have acquired the technique. For example, in the 1920s, the behavior of puncturing the top of milk bottles to get access to the cream spread among blue tits in England, possibly as a result of the birds learning the trick from each other (Shettleworth, 1998). However, as Shettleworth (1998) noted, many alternative explanations are possible for these and other cases of what seems to be culturally transmitted information in non-human animals.

Perhaps the strongest evidence for culture in other species can be found among other primates. One of the best-known examples is the cultural transmission of wheat and sweet potato washing in Japanese Macaques on Koshima Island (Matsuzawa, 2003). On Koshima, starting in the 1940s, the primatologist Kinji Imanishi and his students began leaving wheat grain and sweet potatoes on a beach to attract a troop of macaques so that they could be observed up close. In 1953, one young female macaque named Imo was observed taking sweet potatoes and wheat to the edge of the sea and washing off the sand, probably making the food more palatable. This behavior then spread over the next few years to all the other members of Imo's troop, apparently through troop members' observations of Imo's behavior (Matsuzawa, 2003). Other well-known examples of what appear to be culturally learned behaviors can be found in our closest relative, the chimpanzee. Since Jane Goodall's famous observations in the 1960s of tool use among chimpanzees, researchers have been investigating tool use and manufacture in different populations of chimpanzees across Africa.

One interesting conclusion of this research has been that different groups of chimpanzees have different ways of manufacturing and using tools which are specific to a particular group—what some consider "cultural traditions." For example, at Bossou, in Guinea, chimpanzees use a pair of stones as a hammer and anvil to crack hard nuts. While large nuts are common in many areas where chimpanzees live, this particular tool kit for breaking nuts seems to have been locally developed and passed on; chimpanzees in many other areas where such tool use would be useful have not been observed to engage in this behavior. Young chimpanzees in Bossou learn the art of nut cracking with a hammer and anvil when they are young, through observation of experienced adults (Matsuzawa, 2003). Matsuzawa (2003) described several other examples of culturally transmitted traditions among chimpanzees. There is even evidence that chimpanzees acquire non-functional behaviors from each other—in one case the habit of putting a blade of grass in one's ear spread in a group of chimpanzees, similar to the way that fashion trends spread in human communities (van Leeuwen, Cronin, & Haun, 2014). Furthermore, it is becoming increasingly clear that other long-lived, big-brained animals also have the capacity for social learning and the development of traditions (see de Waal & Tyack, 2003 for examples in dolphins, elephants and parrots, and others).

Although the abilities of some primates, birds, and other animals to acquire tools and problem-solving techniques from each other is impressive, what is most surprising about these examples of what may be considered culture is their relative simplicity compared to what any human community can achieve. If we compare the simple tools of chimpanzees, such as hammers and anvils, to the culturally acquired knowledge of the inhabitants of Tierra de Fuego at the time Darwin observed them, we see that the latter—skills such as building canoes, manufacturing weapons, and learning tribal language—are much more complex than wielding a heavy stone to crack a hard nut. No other species has evolved the extensive ability humans have to learn from each other and to modify and pass on what we have learned, leading to the cumulative change in knowledge, which is a hallmark of human culture (Henrich, 2016). As such, culture is a human adaptation that has allowed us to spread across the world and survive in a wide variety of environments.

Cultural knowledge has been an important component of our species' success. Through observing and learning from each other, we can learn various techniques necessary for survival in different environments. A good example of this is learning what to eat and what to avoid eating. There is evidence that other species base their food choices on what their con-specifics eat. For example, young rats prefer to search for food where other rats are eating, and prefer to eat the same food that other rats eat. Rats can even learn to select a new food item by smelling the breath of other rats (Shettleworth, 1998). This type of social learning is clearly adaptive for omnivorous animals that need to carefully select between potentially poisonous and nutritious food options. Like rats, humans are omnivores and have faced

similar challenges in learning what to eat. One difference between humans and rats is that while rats have to rely on a relatively simple process of observation and social learning, humans can transmit a great deal more information culturally. We learn from our parents and other elders in our culture what to eat, how to prepare food, and which food items to avoid.

Cultural traditions are important for survival. Henrich (2016), for example, described the tragic case of two European explorers who died of malnutrition in the 1860s in the Australian interior. These explorers died even though they encountered a local aboriginal group who showed them that a local fern (called nardoo) was edible. The Europeans attempted to prepare and eat the fern, which the aborigines baked into a cake, but developed the disease beriberi, caused by a deficiency of the B vitamin Thiamine. The nardoo fern contains high levels of the enzyme thiaminase which breaks down thiamine. The unfortunate explorers did not follow the aboriginal recipe exactly; if they had, they would have baked the fern cakes in ash, eliminating most of the thiaminase. The aboriginal tribes who developed the methods for preparing edible nardoo cakes had the benefit of generations of cultural knowledge, passed down and improved upon by each generation, about how to exploit food sources in the Australian interior. Without that cultural knowledge, Europeans in the same environment could not survive.

A similar well-known example of the survival value of cultural practices in food preparation is the case of cooking corn in the Americas. Corn was first domesticated in the Americas over 7,000 years ago and introduced to Europe by explorers only 500 years ago. Upon its introduction, corn was rapidly assimilated into European diets; it was a filling and easy to grow food. One problem with corn as a staple in the diet is that it is deficient in the B vitamin niacin, and niacin deficiency can result in the disease pellagra, characterized by painful skin lesions and, if untreated, death (Katz, Hediger, & Valleroy, 1974). After corn was introduced to Europe, outbreaks of pellagra became common not only in Europe, but also later in the United States and in Asia and Africa, where the cultivation of corn was subsequently introduced. Interestingly, pellagra is very rare in native populations of the Americas due to the traditional method of preparing tortillas, involving cooking corn with lime, a practice common across Central and Latin American cultures. This method of preparing corn increases the niacin content of tortillas and prevents pellagra (Katz et al., 1974).

An interesting cultural variation between human societies is not only the range of foods we eat, the ways in which we prepare our foods (our cuisines), but also the foods that we choose to avoid as taboos. In every culture around the world there are potential food sources that are considered off limits (Meyer-Rochow, 2009). There are probably a variety of reasons for these cultural variations in diet. One may be that food preparation and food taboos are markers, allowing for members of the same group to recognize each other (Meyer-Rochow, 2009). If two people both like beef and refuse to eat pork and a third person is a pork eater, it is easy to know which people probably belong to the same tribe and who is the outsider.

These sorts of shared cultural practices can increase within-group cohesion and give group members a sense of shared identity (Meyer-Rochow, 2009).

On the other hand, there is also evidence that some of our food preferences and avoidances are cultural adaptations that help a population survive in a specific environment. For example, one well-known observation is that cooking traditions in populations from warmer climates tend to use more spices such as chili peppers, onions, and garlic, compared to cuisines from cooler areas (contrast Indian and Swedish cuisines, for example). Researchers have proposed various explanations for this geographical variation, such as the possibility that the strong flavor of spices may mask the bad taste of rotting food, a problem more likely to be faced by a cook in a tropical climate than a temperate one, particularly before the introduction of refrigeration. One hypothesis that has a fair amount of supporting evidence is that spices such as garlic, onions, and chili have antimicrobial properties that help protect the consumer from potential pathogens in food—pathogens that are particularly likely to affect foods in warm climates (Billing & Sherman, 1998). As a consequence, recipes from hotter climates have more antibacterial properties, decreasing the chances of food poisoning and infection and increasing the chances of survival and reproduction of people from those cultures.

Just as a preference for spices may be a culturally propagated adaptation for survival in warm environments, food taboos may also be adaptive. For example, Henrich and Henrich (2010) described various food taboos in Fiji, specifically taboos concerning what pregnant and breastfeeding women can eat. Although the diet of people in Fiji is heavily based on seafood, pregnant women in Fiji avoid specific fish that are high in toxins and may be a significant source of poisoning. Across cultures, food taboos specific to pregnant and lactating women are common (Meyer-Rochow, 2009). Given that food poisoning in a pregnant or breastfeeding mother would be dangerous not only for the mother but also the offspring, the avoidance of potentially dangerous fish during these periods makes evolutionary sense. As Henrich and Henrich (2010) noted, an important advantage of a cultural food taboo leading to avoidance of dangerous foods is that individuals need not learn about the dangers through costly trial and error. On Fiji, women learn from their mothers and other elders which foods are off limits when they become pregnant.

A similar explanation can be applied to the observation that the most common cultural food taboos are for various meats. Meat can spoil and is therefore a common vector for bacteria and other sources of food poisoning. It makes sense from an evolutionary point of view that taboos against the consumption of meat are the most common food taboos across cultures (Fessler & Navarrete, 2003). Interestingly, not only are taboos against eating meat prevalent, but they are particularly common for pregnant and breastfeeding women across cultures, and animal proteins are also a frequently occurring pregnancy-related food aversion (Fessler, 2002). Because one feature of pregnancy is a suppression of the immune system, it makes evolutionary sense for pregnant women to avoid potential sources of pathogens,

hence the common experience of meat as a trigger of morning sickness (Fessler, 2002). Cultural practices surrounding food preparation and food taboos are adaptations for survival in specific environments. In some cases, once a behavior becomes common in a population as a result of cultural transmission, that behavior can itself create the conditions for natural selection to act on genetic variation, a process that has been called gene-culture co-evolution (Durham, 1991).

#### **Gene-Culture Co-Evolution**

The example of human adaptation to high altitudes and high latitudes points to an interaction between cultural and genetic evolution. Culturally acquired knowledge allows people to survive in high-altitude environments, and across generations that particular environment selects for advantageous traits, genetic variations that mitigate the harmful effects of living at high altitudes. Other examples more clearly point to the co-evolutionary link between genetic and cultural change (Durham, 1991). In some cases, cultural innovations themselves create the environment in which natural selection can then select adaptive traits. An example of such a co-evolution of culture and genetic selection is the evolution of the sickle cell trait in response to the threat of malaria.

Sickle-cell anemia is a recessive genetic disease that seriously affects the health of individuals who inherit two copies of the sickle-cell allele, causing severe pain and often an early death, meaning that individuals who are homozygous for this trait would usually not reproduce. The puzzle of sickle-cell anemia then is why the prevalence of this trait is so high, with estimates of around 20% of people carrying one copy of the sickle-cell allele (and therefore likely to have one out of four children develop the disease if they reproduce with another carrier of a copy of the same allele) in populations across Sub-Saharan Africa as well as parts of the Mediterranean and India (Livingstone, 1958). Why would a potentially deadly trait, which decreases the chances of reproduction and of passing the trait to succeeding generations, be maintained at such high rates? Researchers have long known the answer to this puzzle: Being a heterozygote carrier of the sickle cell allele provides protection against one of the most deadly diseases our species faces—malaria (Allison, 1973). Malaria is caused by the protozoon Plasmodium falciparum, which is spread by mosquitos, and the disease affects up to a half million people around the world each year (Rich & Ayala, 2000). There is evidence that Plasmodium has been a disease vector in humans during our entire history as a species (Rich & Ayala, 2000), and therefore could be an important selective force in human evolution. Red blood cells in carriers of the sickle cell allele are misshapen (appearing sickle-shaped) due to an abnormality in the protein hemoglobin, which carries oxygen in red blood cells. In people who are homozygous for the sickle cell allele, all the red blood cells are affected, and the result is poor circulation and

anemia, leading to the various health consequences of the disease. In people who are heterozygous for the sickle cell allele, the sickling of the red blood cells only occurs under certain conditions such as during extreme exertion when oxygen levels in the blood are low. However, heterozygous carriers of the sickle cell trait enjoy the advantage of being protected against infection by the malaria parasite (Allison, 1973), which has led to selection of the sickle cell allele in areas where malaria is common.

One interesting feature of the sickle cell allele is its geographic distribution. In Sub-Saharan Africa, it is found in some populations that face the threat of malaria, but is absent in other groups living close by and facing the same danger (Durham, 1991). Livingstone (1958) and Wiesenfeld (1967; Coursey, Alexander, & Wiesenfeld, 1968) identified agricultural practices as the key to the distribution of the sickle cell trait. As outlined by Durham (1991), the populations in Africa in which high rates of the sickle cell allele can be found are those that traditionally practiced yam farming. Neighboring groups that were traditionally hunter-gatherers show low rates of the sickle cell allele, even though they currently face the same threat of malaria. In creating farms out of the forest, yam farming cultures clear out large areas, cutting down trees and clearing underbrush, and thereby creating areas where pools of water can collect and be warmed by the sun, making for ideal breeding grounds for the mosquito that carries the malaria pathogen. Deep in the dimly lit forest where hunter-gatherer tribes lived, malaria-carrying mosquitoes were less likely to breed. This meant that malaria has been a challenge for farming cultures for much longer than for hunter-gatherers. In Africa, yam farming dates from around 2,000 years ago (Wiesenfeld, 1967), and over the course of that time, being heterozygous for the sickle cell trait has been advantageous enough in avoiding malaria that the trait has spread in those traditionally yam farming cultures. Traditional hunter-gatherers have not had sufficient length of exposure to malaria to evolve the same adaptations to the disease.

The co-evolution of the sickle cell allele and yam farming in Africa is a particularly clear example of cultural practices creating the selective forces that shape human genetic evolution. Without clear cutting the forests for yam farms—a cultural practice—the environment would not have been created for the increased threat of malaria infections, which in turn created the selection pressure for the spread of the sickle cell allele.

Another example of how human cultural practices can be the driving force for human genetic evolution involves the case of dairy farming and the trait of lactose persistence. In mammals, the ability to digest lactose (the main carbohydrate in milk) is due to the enzyme lactase (Durham, 1991). In most mammals, lactase production comes to an end at weaning and as a result most adult mammals are unable to digest lactose. In humans, this inability to digest lactose leads to symptoms of lactose intolerance (nausea, pain, diarrhea, and other intestinal symptoms). In some human populations, however, the production of lactase continues into adulthood, allowing for lactose tolerance and the ability to consume raw milk and milk

products high in lactose without ill effects across the lifespan (Troelsen, 2005). The puzzle of lactose tolerance is why only some people have this tolerance, while others are lactose-intolerant after infancy. For example, lactose tolerance is much more common among people of Northern European descent compared to Southern Europeans (Beja-Pereira et al., 2003). Lactose tolerance is very rare in East Asia, Sub-Saharan Africa, and among Native Americans (Durham, 1991).

The ability to digest lactose into adulthood turns out to be closely associated with the cultural practice of milk consumption. Those cultures which have a long history of dairy farming and milk drinking (Northern Europe and parts of the Middle East and Africa) have high rates of lactose tolerance. Rates of lactose tolerance are much lower in cultures without such cultural traditions (Beja-Pereira et al., 2003; Durham, 1991). The ability to digest lactose resulted from a mutation that occurred about 5,000-10,000 years ago in the lactase gene, around the same time as domestication of cattle by humans, resulting in continued lactase production into adulthood (Troelsen, 2005). One puzzle, however, is that even among cultures with a history of dairy farming, rates of lactose tolerance can vary substantially—thus, lactose tolerance is higher among Northern Europeans (e.g., Scandinavians) compared to Southern Europeans (e.g., Greeks), even though both cultures have a long history of dairy farming. An explanation may be found in milk's high calcium content. As described above, one selective force in human evolution has been ultraviolet radiation, which has contributed to variations in skin pigmentation. That variation is partly due to a loss of skin pigment among groups living at high latitudes, as an adaption to absorb more ultraviolet light through the skin, which is needed for vitamin D synthesis and calcium absorption. Milk is a rich source of calcium, and lactose, like vitamin D, increases calcium absorption (Durham, 1991). Therefore, populations living in high latitudes gain the additional lactose tolerance benefit of increased calcium absorption and vitamin D supplementation, a benefit that those living closer to the equator would not need. This fact could explain some of the cultural variation in milk use—drinking fresh milk is much more common in Northern European cultures, while Southern European cultures are more likely to process milk into cheese and yogurt. Processed milk products like cheese and vogurt have less lactose than fresh milk and are therefore better tolerated by lactose-intolerant individuals. At higher latitudes, the need for lactose as a vitamin D supplement and for calcium absorption has led to the cultural practice of drinking more fresh milk, in turn increasing the selective advantage of lactose tolerance, and leading to the spread of the trait (Durham, 1991). Interestingly, there are different alleles for lactase persistence and these different alleles are found in different cultural groups, suggesting that this trait may have evolved independently several times in different human dairy farming populations (Enattah et al., 2008).

One final interesting, if gruesome, example of how cultural practices can create environments that natural selection can act upon is the case of the disease Kuru in Papua New Guinea. Kuru is an example of a prion disease, similar to

Creutzfeldt-Jakob disease (Rhodes, 1998). Prion diseases captured public attention in the 1980s with the outbreak of Bovine Spongiform Encephalopathy, or Mad Cow Disease, in Europe. Prion diseases are caused by the accumulation in the body of an altered form of a protein called the prion protein (PrP) (Mead et al., 2009), which destroys neurons and ultimately results in dementia and death. In New Guinea, Kuru broke out in one population, the Fore people in the highlands of the island, and was first described by Western medical workers in the 1950s. During that era, the disease killed large numbers of the Fore. Medical authorities ultimately determined that the spread of the disease was due to the cultural practice of cannibalism; family members would eat the corpses of dead loved ones during funerary rituals (Rhodes, 1998). Eating the flesh and organs, especially the brain, of individuals who had died of Kuru led to infection, and at the peak of the outbreak, before the practice of cannibalism was ended by the colonial authorities, as many as 2% of the population (mostly women and children) were dying from Kuru each year. Interestingly, this deadly disease, spread by a particular cultural practice, seems to have led to selection for a particular allele of the PrP which provides relative immunity to the disease. Among the Fore people today, this particular allele is found among the survivors of the Kuru outbreak of the 1950s and their descendants, but not in other populations (Mead et al., 2009).

#### **Evolved Cross-Cultural Variation and Similarities**

So far, we have considered examples of the evolution of different genetic and cultural adaptations in different environments. Cross-cultural research can illuminate these variations, whether they are unique to populations living at high altitudes, facing particular pathogens, or using new cultural practices, such as dairy farming. On the other hand, a large body of cross-cultural research in evolutionary psychology has focused on investigating and identifying human universals—traits that humans of many different cultures share in common. One of the central principles of evolutionary psychology is that humans share certain cognitive and behavioral predispositions based on our shared evolutionary history (Barkow, Cosmides, & Tooby, 1992). The assumption is that the human species spent much of its evolutionary history living in small groups on the savannah in Africa, and during this long period of time our minds were shaped by evolutionary processes to solve the sorts of problems our ancestors faced in this social and physical environment, often termed our environment of evolutionary adaptedness. Elsewhere in this volume (Chapter 24, for example), we see evidence for universals in human emotional expressions. Charles Darwin (1872/1965) originally proposed in The Expression of the Emotions in Man and Animals that some emotional expressions were cross-cultural universals, found in all human populations. These emotional expressions allow for communication even between individuals who do not share the same language,

a situation Darwin repeatedly experienced during his voyage. As Matsumoto and Hwang (Chapter 24 in this volume) describe, Darwin's hypothesis has received modern support, with some emotional expressions being common not only in people of different cultures but even in the congenitally blind. Other researchers have documented cross-cultural similarities in sexual and aggressive behaviors.

A large body of cross-cultural research highlights similarities across diverse cultures in characteristics that people find sexually attractive and unattractive. For example, one finding confirmed in a variety of cultures is an apparent universal taboo against incest (Durham, 1991). Given that close relatives are likely to carry similar deleterious alleles, avoiding reproduction with a relative makes evolutionary sense. A number of studies suggest that humans have evolved a tendency to avoid sexual relations with people they have grown up with, people who would often be close relatives. Thus, children raised communally in Israeli kibbutzim, where individuals tend to associate closely with each other for most of the day throughout their childhood, avoid marrying each other even though they are not closely related. Associating with each other as children seems to lead to sexual aversion (reviewed by Durham, 1991). Similarly, in traditional Taiwanese families, some marriages are arranged when the husband and wife are still children and the wife to be then moves in with her future husband's family, to be raised alongside him. In these cases, when the couple eventually marry, the marriage is less likely to result in offspring and more likely to end in divorce than marriages in Taiwan that are arranged in adulthood (reviewed in Durham, 1991). These findings suggest that a universal trait across human populations is a tendency to identify individuals with whom we grow up as close relatives and to avoid mating with them.

Evolution has not only shaped with whom we do not want to have sex, it has also played a role in determining whom we find sexually attractive. In The Descent of Man and Selection According to Sex (1871/1981), Darwin proposed a second mechanism for evolutionary change that operates independently of natural selection sexual selection. Sexual selection refers to cases in which a trait may be selected for not by the environment, but by potential mates of the opposite sex. As individuals select with whom to mate, those with traits considered attractive by potential opposite-sex mates will be more likely to reproduce and pass on their attractive traits to the next generation. Darwin proposed sexual selection as a way to account for traits that do not seem to have obvious value for survival, such as the colorful plumage of some birds. Both natural selection and sexual selection play a role in whom humans find attractive. For example, both males and females tend to find faces that are higher in symmetry and average appearance (that is, faces created out of composites of many faces averaged together) more attractive than asymmetrical and divergent faces (Langlois & Roggman, 1990). This tendency can be explained in terms of an evolved preference for signals of good health in a partner, as disease and malnutrition represent ways that faces may become asymmetrical and unusual in appearance (Rhodes et al., 2007). Other traits judged attractive may

similarly serve as signs of good health: for example, clear skin, body shape in both males and females, and tall stature in males (Etcoff, 1991).

In an important cross-cultural study, Buss (1989) compared male and female preferences in potential mates across 37 cultures around the world. As reproduction is more costly for females than males (females invest more in becoming pregnant and bringing the offspring to term and more in feeding and caring for the offspring in infancy and childhood), and males invest minimally in any one act of copulation, an evolutionary prediction would be that females have evolved a tendency to be more selective in choosing potential partners. In particular, as human offspring are so costly to raise, females should select partners based on their potential to provide resources to any future offspring. On the other hand, because fertility in human females declines later in life, males should have evolved a tendency to be interested in younger and more fertile females as potential partners. Because youthful appearance is one cue to reproductive potential for females, males should place more emphasis on the importance of appearance in a mate than females. Further, because mothers always know that a child is theirs, but fathers (before the introduction of DNA tests) may not be certain that a child born to their mate was not fathered by another male, researchers have predicted that males would consider chastity a more attractive trait in a potential mate than females would (Buss & Schmitt, 1993). Across a variety of cultures, Buss (1989) found evidence in support of these predictions. Females around the world rated the earning potential and ambition of potential mates as more important factors when selecting mates than did males, while males rated physical attractiveness and chastity as more important when selecting mates than females did. Importantly, Buss also noted that there were cross-cultural differences in how strongly males and females rated the importance of each of these factors; for example, while chastity was rated as important by males in Asian cultures, it was not rated as important by either gender in Northern European cultures (Buss, 1989).

Other cross-cultural research has similarly found both cross-cultural similarities and differences in what people consider attractive in a potential mate. For example, there is some evidence that a preference for more "average" and symmetrical facial features is universal. In an interesting set of studies, Rhodes and colleagues (Rhodes et al., 2001, 2005), found that Caucasian Australian, Japanese, and Chinese participants all rated average faces (computerized composites of many faces) as more attractive than any of the individual faces that contributed to the composite, and Rhodes et al. (2005) found that both Caucasian Australian and Japanese participants found average mixed-race composites (averaged across Caucasian and Asian faces) the most attractive. The judgment of average faces as more attractive seemed to be based on perception of average faces as more healthy, regardless of the ethnicity of the face or the judge (Rhodes et al., 2007). On the other hand, Apicella, Little, and Marlow (2007) tested judgments of facial attractiveness among the Hadza, a hunter-gatherer population in Tanzania. Although the Hadza showed a preference for averaged Hadza faces compared to individual Hadza faces, they

did not show a preference for averaged Caucasian faces, suggesting that judgments of attractiveness depend in part on experience, as the Hadza participants in this study had little experience interacting with Caucasians.

The Hadza preference for averaged Hadza faces but not European faces points to the importance of life experiences and culture in determining standards of beauty. In another example of cross-cultural variation in views of attractiveness, a preference for taller males is common among females in many cultures (Smith, 2018), but is not universal (Sear & Marlowe, 2009; Sorokowski, Sorokowska, Fink, & Mberira, 2012). The role of experience in judgments of beauty can also be seen in judgments about body shape; much research in Western and some other cultures suggests that a low waist-to-hip ratio in females is considered more attractive than higher ratios (Etcoff, 1991). However, the effect of waist-to-hip ratio on judgments of attractiveness seems to depend in part on culture. Yu and Shepard (1998) failed to find an effect of hip-to-waist ratio on judgments of attractiveness of female figures in an isolated indigenous group in Peru, where figures that would elsewhere be judged as "overweight" were judged more healthy, attractive, and desirable by males, compared to "hourglass" female body shapes. One factor that may play a role in these cultural differences is wealth and access to resources. In groups where resources are scarce, larger female bodies are judged as more attractive, perhaps due to the reproductive advantage of having more body fat in an environment of scarcity (Swami & Tovee, 2007). Similarly, greater income inequality and high crime rates in a society are correlated with stronger female preference for more masculine faces (Brooks et al., 2011). Pisanski and Feinberg (2013) reviewed many more examples of cross-cultural variations in views of attractiveness.

In addition to mate choice and judgments of attractiveness, researchers have also examined violence and aggression across cultures. In an influential series of studies, Daly and Wilson (1988) documented higher rates of violence, aggression, and homicide in males compared to females across cultures. Clearly, violence and acts of aggression by males have been a part of the human experience throughout our history as a species (Buss, 2006; Pinker, 2011; Sapolsky, 2017). As Daly and Wilson (1988) documented, males are both perpetrators and victims of homicidal violence at far higher rates than females in cultures all around the world. Evolutionary psychology would argue that these gender differences in violence are due to different evolved adaptations. Males evolved to compete against each other, often for access to females. As females choose to mate with males who have the most resources to provide, those males with the least resources, usually the young adults, would be most likely to resort to violence in order to have the opportunity to reproduce. This idea can explain not only gender differences in violence, but also the higher rates of violence in younger adult males compared to older males (Daly & Wilson, 1988).

Although males indeed appear more violent than females in a range of cultures (Daly & Wilson, 1988), there is a great deal of variation in overall rates of violence

from one culture to another. As Sapolsky (2017) pointed out, rates of homicide, domestic violence, sexual assault, and bullying all vary enormously across cultures, as do other factors that may be related to the likelihood of aggression and criminal behavior, such as literacy and gender equality. Pinker (2011) has documented similar dramatic variations in rates of violence across human history. These cross-cultural and historical differences in rates of violence suggest that although aggressive behavior may be an evolved adaptation in humans, especially human males, environment, experience, and culture can influence the likelihood that we act on any evolved behavioral tendencies.

#### Conclusion

Like all life forms on Earth, the human species has been subject to the forces of evolution. Natural and sexual selection have played a role in determining both the traits that are human universals, and those characteristics that are more prevalent in some cultures than others. Human cultural traditions have also shaped the environments in which humans live, interacting with evolutionary forces to create differences between human populations. Cross-cultural research can help to identify those co-evolved traits, understand the similarities and differences among cultural groups, and lead to a better understanding of ourselves as a species.

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# Part III Development

In every culture, children are born, grow to adolescence, become adults, develop to the extent their personal characteristics and circumstances allow, and eventually die. Psychological researchers have studied development extensively, especially in the areas of cognition, psychosocial development, attachment, and temperament. Psychologists interested in lifespan development have investigated various aspects of adulthood and aging, including the fascinating cultural variations in perceptions of aging. These are some of the aspects of development that we will encounter in Part III.

Virtually all students of psychology study development, including a common core of theoretical and empirical work. However, in recent years, investigators have begun to question the extent to which theoretical perspectives in the field embody ethnocentric assumptions about their generality across cultures. Are traditional findings limited, for example, by the fact that many studies have been conducted on middle-class European American children? Fortunately, the field has advanced toward an appreciation of a much wider range of human settings and the realization that there are significant developmental variations that must be understood in cultural context.

In this section we will explore, then, the extent to which culture may shape cognitive development, psychosocial development, attachment, temperament, physical and mental health, and education. We will see that developmental aims or ideals may not be the same for all cultures, and that the reality of life may be very different for developing humans across cultures. Cultural differences will be particularly apparent in the lives of adolescents. This of course raises the question: How universal is our understanding of human development?

We will also note coming changes in the population of elderly people in the world, with forecasters predicting large increases in coming years. How will these people be perceived? How will they be treated? What role does culture play in determining the answers to these questions? What are the effects of social, political, and economic variables on views of aging?

Culture, we will see, may shape the roles played by the elderly. They may be seen, for example, as grandparents, as advice-givers, or as sources of wisdom. Their relationship to younger generations may also vary across cultures, and their perceptions of death may be intertwined with religion, living arrangements, cultural values, and retirement policies.

In short, development is a fascinating, multi-faceted process. It is intimately related to, and strongly shaped by, culture; and it remains dynamic and malleable from birth to death.

# Child Development Across Cultures

# Adriana Molitor and Hui-Chin Hsu

During the latter half of the last century, developmental psychology earnestly began cross-cultural explorations. Although much remains unknown, great strides have been made in identifying similarities and variations in the development of children around the world. Despite the field's awareness of limitations in the universality of traditional theories and findings, the developmental phenomena and patterns discussed in undergraduate courses are often implicitly regarded as capturing unequivocal regularities in child development. However, the bulk of developmental knowledge has derived from research and theory focused on a small segment of the world's people—most often, middle-class European-American children and families. This chapter considers the cross-cultural applicability of some of the most popular content addressed in undergraduate developmental psychology and reviews research that has revealed similarities and differences across cultures.

According to Super and Harkness (1986, 1994, 1997), three interconnected components of culture work together as a system (i.e., a developmental niche) to influence children's development. *Customs and practices* refer to normative and individual child-rearing practices within a culture that range from pragmatic strategies to symbolic or religious rituals. These culturally-regulated behavioral practices incorporate sleeping and feeding routines, child care arrangements, interpersonal interaction styles, and teaching approaches. *Settings* capture the physical, economic, and social contexts in which the child resides and include ecology, living space, family composition, and objects. Finally, *caretaker psychology* encompasses not merely the psychological attributes of a parent but wider cultural belief systems, particularly shared understandings about the development and needs of children. These include implicit "ethnotheories" about how competencies

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unfold (e.g., nature vs. nurture), timetables for expectations, desired competencies, and ultimate goals for development. Super and Harkness (1986, 1997) emphasized that the three components do not operate independently; rather, socialization practices are intimately tied to the cultural beliefs and ecology of a child's developmental niche. Unfortunately, however, the interconnections are not consistently studied or uncovered in psychological research. As we review reports of cross-cultural differences in child development, it is nevertheless important to recognize that connections exist between cultural practices, beliefs, and settings even if they are not, as yet, fully understood.

# Cognitive Development: Piaget's Stages

The study of children's thinking traces its origins and inspiration to the pioneering research and prolific writings of Jean Piaget. Among the basic tenets of his integrative theoretical perspective (see Flavell, 1963, for a comprehensive review) is the renowned proposition that intellectual processes advance qualitatively in a series of four progressive stages. Although much of his research was conducted on his own children and children in Geneva, Switzerland, Piaget assumed he was uncovering universal patterns of thought and development (Crain, 2005; Dasen, 1994). Cross-cultural investigations indicate that in some respects, Piaget was correct in his depiction of cognitive growth; however, many aspects of his theory have not been supported even within Western samples. His perspective has been enormously influential, but the modern study of cognitive development has shown Piaget's stage portrayal to be inaccurate and insufficient in accounting for the full range of transformations in children's cognition.

#### Sensorimotor Stage

Piaget described the period between birth and the second birthday as sensorimotor because infants rely on basic sensory and motor abilities to understand the world. He proposed that infants initially do not "think" about objects apart from acting on or perceiving them. Instead, thinking and behavior are fused as the dominant cognitive structures are simple action schemes. The ultimate achievement of this stage is the enduring and flexible capacity for symbolic schemes, enabling the tod-dler to internally represent objects, actions on those objects, and other complex experiences via mental imagery and symbols, including words (Piaget, 1964/1969). One means of displaying this cognitive advancement is the retrieval of hidden and invisibly displaced objects.

Although research by others has suggested that Piaget underestimated infants' capacity to represent and understand the object world (and social world) because

of his reliance on infants' physical-motor execution, his description of sensorimotor task performance is considered universal. For example, in a well-known study of the rural Baoulé culture in Côte d'Ivoire in West Africa (see Berry, Portinga, Segall, & Dasen, 1992), infants displayed the same sequence of sensorimotor substages proposed by Piaget. Minor variation occurred in the average month of onset with the Baoulé infants performing earlier on some tasks requiring object use—believed to be tied to these infants' extensive access to non-toy objects (Berry et al., 1992). Studies of infants in India (Kopp, Khoka, & Sigman, 1977), Guatemala (Kagan, 1977), and Zambia (Goldberg, 1972) have also reported similar unfolding of sensorimotor abilities in terms of sequencing, although with occasional delays in timing. Kopp et al. (1977) argued that cultural caregiving practices likely accounted for onset differences between Indian and American samples. For example, Indian mothers indirectly terminated hidden-object tasks by quickly comforting infants' frustration elicited by the give-and-take of these tasks.

Dasen and Heron (1981) pointed out that even at this first stage, performance is not driven entirely by maturational or equilibration factors (e.g., assimilation and accommodation). Rather, cultural experiences alter the rate of progression of particular substages, albeit in a minor way. Dasen and Heron otherwise emphasized the remarkable commonality among findings, not only in substage order but in the specific manipulative and exploratory behaviors described. Even chimpanzees exhibit the same sequence of sensorimotor performance described by Piaget (Cole, 2006).

#### Preoperational Stage

The second cognitive stage is marked by the pervasive, enduring, and flexible use of symbolism to mentally represent objects and experiences. Thus, children in this stage (approximately 2–6 years) think in the conventional sense; they can reflect on absent objects and people, recall the past, and imagine future events. Symbolic capacity is evident in burgeoning language, imitation, and creative/imaginative play activities. Piaget, however, referred to this stage as preoperational because thought yet lacks operational structures enabling linked, reversible mental actions on objects (Piaget, 1964/1969). Overt limitations include unidimensional and end-state focusing, perception-bound reasoning, transductive causality, and egocentrism (see Trawick-Smith, 2010). Cognitive constraints lead to semi-logical thinking about objects and events, which is evident in basic scientific reasoning tasks.

The preoperational stage has been portrayed as universal (Dasen & Heron, 1981); however, this conclusion is chiefly supported by studies confirming that young children across cultures fail logical problem-solving tasks such as conservation of properties (e.g., amount and number remain the same despite changes in appearance), multidimensional classification, and/or spatial reasoning. Nevertheless, available research supports the universality of some additional

features of preoperational functioning. For example, in terms of the rapid development of language during this stage, psycholinguists confirm that by age 5 children around the world have mastered most of the basic rules of syntax of their native language (Trawick-Smith, 2010). In terms of emerging symbolism in play, Dasen and his colleagues (see Dasen & Heron, 1981) found that young children in the Baoulé culture of West Africa displayed the same sequence of development (from conventional to symbolic play with objects) at about the same ages as French children even though the content differed.

Further preoperational depictions are equivocally supported within Western samples, although similarities in traditional conceptualizations have been found across cultures. For example, 3- to 5-year-olds across cultures display similar patterns of errors and age improvements in distinguishing appearance from reality (e.g., Flavell, Zhang, Zou, Dong, & Qi, 1983). Yet methodological probing of Western samples suggests that in some circumstances preschoolers can readily distinguish appearance from reality (see Deák, 2006). Cross-cultural studies also support the universality of traditional notions of egocentrism (i.e., viewing the world only through one's perspective). For example, Fahrmeier (1978) and Greenfield and Childs (1977) respectively found reversed linear age trends for egocentrism among children of the Hassau (Nigeria) and Zinacanteco Mayan (Mexico) cultures. Nonetheless, modern research has suggested that young children are not as consistently egocentric as Piaget originally proposed, while also confirming that perspective-taking and knowledge about the mind greatly increase with age (Flavell, 2000).

#### Concrete Operational Stage

In Piaget's third stage (beginning at approximately 5–7 years), the capacity for cognitive operations appears; that is, children can now perform linked, reversible mental actions on objects (Piaget, 1964/1969). Thus, thinking is no longer constrained by the limitations of the preoperational period and children can now understand such processes as transformations and reversibility (see Trawick-Smith, 2010). This new operational capacity is evident in logical problem-solving and successful performance in basic scientific reasoning tasks. Nevertheless, Piaget referred to this stage as concrete because operations (and thus logical and systematic thinking) are limited to tangible objects and activities (i.e., real or readily imagined) and do not extend to ideas and hypothetical propositions (Crain, 2005; Piaget, 1964/1968).

Cross-cultural studies on concrete operational thinking are abundant and typically incorporate tasks assessing conservation, classification, and spatial skills. Considerable commonality has been found in children's performance, particularly among those who receive formal schooling. For example, Shayer, Demetriou, and Pervez (1988) uncovered strikingly similar patterns of emerging operations for British, Greek, Australian, and Pakistani school children (ages 6–12), regardless of

socio-economic background. Still, it is at this stage that remarkable cross-cultural heterogeneity also appears, particularly between Western and non-Western societies; however, disparate findings are not explained by this distinction alone.

Some studies of non-Western cultures have reported similar task performance for classification or conservation as in Western samples, including the same sequence of emergence (e.g., conservation of number, length, weight, area, then volume) and average age of onset. For example, researchers have reported comparable findings for communities in Nigeria, Zambia (see Dasen, 1972), and Kenya (Kiminyo, 1977). Other studies of non-Western cultures have found concrete operations emerging at later ages than in Western samples. For example, in Papua New Guinea, conservation of number (which typically comes first) appears approximately 3 years later than in Western samples, while mastery of more complex tasks (e.g., conservation of area, volume) appears as much as 6 years later (Shea, 1985). Similarly, later onsets, ranging from 1 to 6 years, have also been reported for other groups in non-Western cultures (e.g., Senegal, Algeria, Uganda) for various operational tasks (e.g., classification, conservation) (see Dasen, 1972). The eventual achievement of concrete operations (as well as the observation that tasks which are more difficult for Western children also are more difficult for many groups) suggests some degree of commonality across cultures (Shea, 1985).

The cross-cultural heterogeneity in operational mastery and onset rates is sometimes exacerbated by factors such as urban/rural living, or years of schooling (e.g., Shea, 1985); however, these factors have not consistently led to differences (e.g., Kiminyo, 1977). On the other hand, immediate contextual factors seem to affect performance. For example, assessments using children's native language are associated with improved task execution (Gardiner, 2018). Even more so, children's performance seems to be greatly enhanced by familiarity of task materials (Rogoff, 2003). In terms of underlying developmental differences, Dasen and colleagues (Dasen, 1977; Dasen & Heron, 1981; Segall, Dasen, Berry, & Poortinga, 1999) have argued that ecological demands, particularly those which are uniform within subsistence economies, may explain the diverse emergence of various domains of concrete operational reasoning. In their comparison of data from five cultures (the indigenous Aranda of Australia, the Inuit of Canada, the Ebrié and the Baoulé of Côte d'Ivoire in West Africa, and the Kikuya of Kenya) (Dasen, 1975; Segall et al., 1999), Dasen and colleagues found that children's development of spatial and conservation reasoning varied according to the ecological pressures confronting the different subsistence groups (e.g., nomadic, hunting-gathering versus sedentary, agricultural farming). Overall, the strictly agricultural groups (Kikuyu and Baoulé) showed relatively rapid development of conservation reasoning (e.g., quantity), while the hunting and gathering groups (Aranda and Inuit) exhibited relatively later onsets. The researchers observed the opposite trend for spatial reasoning. The ecocultural relevance of spatial reasoning appeared to be driving its rapid development among nomadic people, while the meaningfulness of conservation promoted its earlier onset among agriculturalists (Dasen & Heron, 1981).

Thus, diverse cultural rates of development of operational domains may reflect the salience of what is, and is not, adaptive and valued within particular societies (Dasen, 1994).

#### Formal Operational Stage

In Piaget's final stage (beginning around the time of puberty), cognitive operations are no longer limited to the physical realm. Thus, the individual can conduct mental actions not merely on objects, but on wholly abstract and hypothetical ideas; these ideas need no longer be attached to vivid representations that are supplied by external reality (Piaget, 1964/1968). Indeed, mental operations on operations become possible (Kuhn, 2008). "Concrete thinking is the representation of a possible action, and formal thinking is the representation of a representation of possible action" (Piaget, 1964/1968, p.174). Formal operational structures include combinatorial and propositional logic (Piaget, 1972) and lead to various behavioral markers—hypothetical reasoning, isolation and control of variables, and systematic combination (Kuhn, 2008), often collectively referred to as "scientific thinking."

Given the wide cross-cultural heterogeneity that began appearing in the concrete stage, it should be no surprise that researchers have not universally observed Piaget's final stage. Among unschooled subjects in traditional non-Western cultures, formal operational reasoning is typically not evidenced when assessed by standard tasks (Dasen, 1972; Dasen & Heron, 1981). Shea (1985) argued that such findings do not necessarily mean the absence of formal reasoning among entire cultures. In fact, formal-level thinking may be present in some remote non-Western communities when assessed via unconventional measures (Tulkin & Konner, 1973). For example, Saxe (1981) reported signs of a developmental trend in formal reasoning among Ponam islanders (ages 8-23) in Papua New Guinea. Specifically, combinatorial reasoning seemed evident by late adolescence during a task requiring construction of hypothetical families using an indigenous birth-order naming system for children. Although such findings are provocative in suggesting the development of formal operations even within remote settings, Segall et al. (1999) cautioned against assuming formal-level reasoning in the absence of standard criteria.

The achievement of Piaget's final stage seems to be strongly related to schooling. For example, among well-educated adolescent samples in several cultural communities in Africa, evidence for formal operations is strong (e.g., Cherian, Kibria, Kiriuki, & Mwamwenda, 1988; Orbell, 1981). However, secondary-level schooling alone is insufficient to promote formal operational thinking, as it is not always evident even among educated non-Western samples (Dasen & Heron, 1981; Segall et al., 1999; Shea, 1985). Cross-cultural trends mimic those within Western cultures. That is, most individuals do not achieve Piaget's final stage. Kuhn, Langer, Kohlberg, and Haan (1977) found that only about a third of adults

in their U.S. sample showed consolidated formal operations. Though many appeared "transitional," a considerable percentage exhibited no signs of formal thinking. The general consensus is that, even among well-educated Americans, only a fraction display formal operations as assessed by traditional Piagetian tasks (Dasen & Heron, 1981; Neimark, 1979). When formal operations are employed, they tend to be exhibited in an area of specialty (White & Ferstenberg, 1978). For example, when assessments used formal-level tasks representing a range of specialty content, De Lisi and Staudt (1980) found that even college students tended to exhibit formal reasoning only in tasks that corresponded to their major.

In response to emerging trends, Piaget (1972) ultimately acknowledged that his final cognitive stage may not be universally manifest, but he believed it likely that all individuals eventually attain formal operations in an area of specialization. Thus, one's ultimate level of cognitive functioning would be reflected only under favorable circumstances (Berry et al., 1992; Dasen & Heron, 1981). The evidence available to date is insufficient to clarify this issue (Kuhn, 2008) and modern scholars have moved away from an assumption of generality in cognitive development and focused their scientific inquiry into domain- and context-specific processing (Rogoff, 2003).

## **Modern Approaches to Cognitive Development**

A sociocultural perspective of cognitive development emphasizes that mental abilities do not develop in a vacuum. Rather, children learn, practice thinking, and develop their skills through participation in everyday activities organized by cultural conventions and routines (Gauvain, 1998; Rogoff, 2003). Cultural practices not only provide opportunities to support and maintain desired patterns of learning, but also impose constraints on cognitive growth (Gauvain, 2001). As a result, culture and cognition are inextricably interlinked. The development of three cognitive processes—attention, autobiographical memory, and theory of mind—serves as illustrations of cultural influences.

#### Attention Development

Mothers in different cultures employ different strategies to guide their infants' attention. For example, American mothers tend to encourage their infants to attend to the environment, whereas Japanese mothers tend to shift infants' attention away from the environment and toward the mother's face (Bornstein, Toda, Azuma, Tamis-Lemonda, & Ogino, 1990; Fernald & Morikawa, 1993). American and British mothers also show a preference for attention-following, where infants lead and mothers follow their infants' focus. By contrast, Chinese and Korean

mothers prefer a style of attention-directing, where mothers scaffold their infants' attention to the object or event of their choice (Sung & Hsu, 2009). These maternal attention regulation styles may reflect cultural values. Western mothers' style of following the child's lead encourages exploratory initiative and reinforces individual interests and choices. By contrast, Asian mothers' style of using a directive tactic may strengthen mother-infant interpersonal connections and ensure the achievement of interpersonal harmony by considering the needs of others.

Childhood attention-deployment strategies also vary cross-culturally. For example, in response to several ongoing competing social events, Guatemalan Mayan toddlers and their mothers showed a pattern of simultaneous attention to multiple events, whereas middle-class European-American dyads demonstrated a style of exclusive attention to one event at a time and alternating attention between events (Chavajay & Rogoff, 1999; Rogoff, Mistry, Göncü, & Mosier, 1993). American children with Mexican heritage also were more likely to display simultaneous attention than those with European heritage (Correa-Chávez, Rogoff, & Arauz, 2005). Furthermore, Mayan children spent more time in sustained attention to interactions not directed toward them, whereas middle-class European-American children spent the majority of time either not attending to activity not involving them or only sporadically glancing at it (Correa-Chávez & Rogoff, 2009). These attentional patterns may reflect different cultural practices. In the traditional Mayan community, children are included in almost all activities. However, because learning situations are not specially designed, children are expected to learn by observing ongoing activity and keeping their attention broadly focused. In contrast, European-American children tend to be the target of adults' exclusive attention. They are encouraged to focus on a particular age-appropriate task and sustain their attention. Thus, according to Rogoff (2014), there are two contrasting cultural practices in organizing learning opportunities during adult-child interactions. One approach, known as "Learning by Observing and Pitching In," is a multifaceted informal learning process in which children are integrated in family and community events and learn by attentively contributing to the ongoing event around them. This approach is prevalent in many indigenous-heritage communities of the U.S., Mexico, and Central America. In contrast, the approach known as "Assembly-Line Instruction" involves adults attempting to control children's attention, motivation, and learning, which is a widespread way of organizing Western schooling.

Cultural differences in attentional socialization practices may contribute to contrasting adult cognitive styles (Cole & Cagigas, 2010). For example, East Asians exhibit a holistic or *field-dependent* style that divides attention between contextual information and a focal object, whereas North Americans display an analytic or *field-independent* style that emphasizes focal information about objects and is less sensitive to context (e.g., Kitayama, Duffy, Kawamura, & Larsen, 2003; Nisbett, Peng, Choi, & Norenzayan, 2001). Research indicates that American and Japanese preschoolers exhibit marked cultural differences in attention strategy that are

similar to adults in their respective cultures. Whereas Japanese preschoolers pay more attention to the whole scene and relations within that scene (e.g., fish in a tank), American preschoolers focus their attention more on individual objects (e.g., fish and a tank) (Kuwabara & Smith, 2012). This evidence supports the view that cultural socialization practices during very early childhood permanently shape how individuals allocate their attention and what information they process.

## Autobiographical Memory Development

An information-processing approach to memory focuses on encoding, recall, and recognition. People tend to remember things that are meaningful and relevant to their concerns. Memories of one's past experiences are further shaped by one's goals, motivations, and perspectives. As such, the same event may be remembered differently by different people. Culture can affect why and what people remember, and whether and how people use their past experiences to guide everyday decisions and actions (Wang, 2016). Studies regarding the effects of culture on children's memory have focused chiefly on *autobiographical* memory—recollections of personal events that occurred in one's past.

Our personal memories from early childhood are sparse. The inability of adults to recall events that occurred prior to age 3 is known as infantile amnesia, and seems to be a universal phenomenon (Fivush & Nelson, 2004; Wang, 2003). However, the onset and content of autobiographical memory vary cross-culturally. Adults from Western cultures with an emphasis on independence have an earlier age of first memory. On average, the earliest memory reported by American adults occurs at 3.5 years, 6 months earlier than those reported by Asians (Wang, 2003, 2016). Additionally, childhood memories reported by American adults tend to be more specific, detailed, and focused on self. By contrast, memories reported by individuals from Asian cultures tend to be more skeletal, generic, and centered on social relationships (Wang, 2003, 2016). Similar findings are observed in childhood. For example, American preschoolers reported more specific autobiographic memories than did Korean and Chinese preschoolers (Han, Leichtman, & Wang, 1998). Variations in belief systems, particularly "self-views," may account for cultural differences in memory onset and content. A social-cultural-developmental perspective (Fivush & Nelson, 2004; Wang, 2016) argues that cultural differences in how self is defined stem from early socialization practices, and are reflected in how early and well people remember their past. Independent cultures place an emphasis on individuality. Thus, an autonomous sense of self guides cognitive resources into processing and remembering significant personal experiences. By contrast, in interdependent cultures, such as China and Korea, because self is defined by people's social role and status in the family and community, a relational sense of self motivates individuals to prioritize information about significant others and social groups (Wang, 2016).

Early parent-child memory sharing is an important vehicle of early socialization to the development of autobiographical memory (Fivush & Nelson, 2004). Across cultures, memory conversations between parent and child differ in their style, content, and degree of maternal elaboration and support. For example, European-American mothers are likely to engage in elaborative talks with their children about positive and negative past events by asking many questions and providing a great deal of nuanced information. They also frequently discuss children's desires, thinking, and feelings, highlighting them as separate and unique individuals (e.g., Wang & Fivush, 2005). By contrast, Chinese mothers tend to focus on moral lessons, discuss past wrong doings, and direct attention to behavioral conduct to avoid negative emotions in the future, without giving causal explanations for the emotion itself (e.g., Wang & Fivush, 2005). Similar to Chinese mothers, mothers in other collective cultures (e.g., India and Turkey) also use a conversation style that reinforces themselves as an authority figure, and focuses on helping children learn from the past and assimilating into the larger society (Sahin-Acar & Leichtman, 2015; Schröder et al., 2013). The style and content of children's memory reports mirror those observed in early parent-child reminiscing (e.g., Han et al., 1998; Wang, 2006). Compared to Asian children, American children provided elaborative and specific accounts of the past, more references to their own feelings, opinions, and preferences, and more mentions of themselves relative to others. When recalling the same event, similar to their Chinese-immigrant counterparts, European-American mothers and children are consistent in reporting factual details and observable behaviors, but inconsistent in reporting subjective experiences and interpretations. Overall, American mothers and children show more disagreements on their memories than Chinese mothers and children. However, whereas American mothers and children agree more on children's internal states in their memories, Chinese mothers and children agree more on children's behavior. These findings are consistent with different family socialization goals and practices in the two cultures (Wang & Song, 2018).

# Theory-of-Mind Development

Theory of mind (ToM), also known as mind reading, is a human capacity to make inferences about other people's mental states, such as desires, feelings, opinions, intentions, and beliefs. ToM understandings may begin to emerge as early as in infancy (e.g., Baillargeon, Scott, & He, 2010). With age, children progress through a series of distinct stages in development (Wellman & Liu, 2004). Gradually, they come to understand that human behaviors are guided by mental states, that their own and others' mental states may be different, and that their own and others' beliefs about reality can be false (i.e., false belief; e.g., an apple is actually an inedible candle). Although all young children in different cultures undergo ToM development, there are two major cross-cultural differences (Slaughter & Perez-Zapata, 2014):

(a) acquisition sequence: Children in different cultures progress through different sequences in developing ToM understandings; and (b) mastery onset: Children in different cultures begin to demonstrate their mastery of false belief at different ages.

In terms of sequential acquisition, typical preschoolers in Western cultures (e.g., Australia, the U.K., the U.S.) follow the order from Diverse Desires (different people want different things), to Diverse Beliefs (different people can hold different opinions), to Knowledge Ignorance (some people may not know a reality), to False Belief (people can have different false beliefs about a particular reality), to Hidden Emotion (people can hide their true feelings by displaying different expressions) (Peterson, Wellman, & Liu, 2005; Wellman, Fang, Liu, Zhu, & Liu, 2006; Wellman & Liu, 2004). Similar to their Western counterparts, non-Western (e.g., China, Iran, Singapore) preschoolers show a consistent sequence of ToM development with understanding of Diverse Desires first. However, unlike their Western counterparts, non-Western children come to understand Knowledge Ignorance before Diverse Beliefs (Peterson & Slaughter, 2017; Shahaeian, Nielsen, Peterson, Aboutalebi, & Slaughter, 2014; Wellman et al., 2006).

In terms of the timing of mastery in false belief reasoning, earlier research suggested a universal synchrony. Typically-developing children in Western (e.g., Australia, Canada) and non-Western (e.g., India, Indonesia, Thailand) cultures, including those in traditional societies (e.g., a Western African remote hunter-gatherer community in Cameroon, a Polynesian settlement in Samoa, an impoverished Peruvian mountain village), show a fundamental shift in understanding false beliefs between 3 and 5 years of age (Avis & Harris, 1991; Callaghan, Rochat, Lillard, Claux et al., 2005; Kuntoro, Saraswati, Peterson, & Slaughter, 2013). They progress from consistently failing false belief tasks at age 3 years to consistently passing the tasks at age 5 years. Yet, other studies have found that children in Hong Kong, Japan, Philippines, and Samoa passed false belief tasks at around 6–8 years of age or older, considerably later than the documented norm (De Gracia, Peterson, & de Rosnay, 2016; Liu, Wellman, Tardif, & Sabbagh, 2008; Mayer & Träuble, 2015; Naito & Koyama, 2006).

There are several explanations for the observed cross-cultural differences in ToM acquisition and mastery. According to one hypothesis, cultural norms and beliefs shape our mental state inferences. For example, Samoa is one of the Pacific cultures characterized by the ideology termed by Robbins and Rumsey (2008) as a doctrine of the "opacity of other minds," in which people assume that they cannot know what another person is thinking unless that person talks about it. Less exposure to and experience with mental state talk may explain Samoan children's delay in the timing of ToM mastery (e.g., Mayer & Träuble, 2012). The collectivist-interdependent versus individualist-independent cultural contrast has also provided a theoretical explanation for the differential ToM acquisition pattern. The emphasis on autonomy, independence, and self-expression in individualist societies may facilitate an earlier understanding of Diverse Beliefs in Western children, whereas the encouragement of obedience, respect, and behavioral inhibition in collectivist cultures

may promote an earlier understanding of Knowledge Ignorance in non-Western children (e.g., Wellman et al., 2006). Thus, children may gain ToM understandings in a pattern consistent with their own culture's preferences and values.

Interestingly, children growing up within the same broader cultural value system also show differential ToM development. For example, British children have outperformed Italian children in ToM reasoning (Lecce & Hughes, 2010). Japanese children (Naito & Koyama, 2006), but not Korean children, have shown a delay in mastery of ToM understandings. In fact, Korean preschoolers outperformed their U.S. counterparts in ToM tests (Ahn & Miller, 2012). Recent studies have further shown regional differences and ethnic diversity within a culture: Preschoolers in Beijing and Chengdu in China (Duh et al., 2016) and preschoolers in Jakarta and Borgo in Indonesia (Kuntoro, Saraswati, Peterson, & Slaughter, 2017) displayed different sequences of ToM understanding. Whereas children in the capital cities (Beijing and Jakarta) resembled or matched the Western sequence, children in smaller cities (Chengdu and Borgo) resembled or matched the non-Western sequence. Also, children of disadvantaged families (trash pickers) living a subsistence lifestyle in Jakarta were slower in mastering Knowledge Ignorance and Hidden Emotion than their middle-class peers living in the same city and in Australia (Kuntoro et al., 2013). Finally, Cantonesespeaking school-aged children attending local schools in Hong Kong performed significantly poorer on ToM tests than English-speaking school-aged children attending British-based international schools in Hong Kong, whose performance was equivalent to their British counterparts (Wang, Devine, Wong, & Hughes, 2016).

Together, these findings indicate that cross-cultural differences in ToM development may reflect variations in children's everyday life circumstances in families and schools through verbal and nonverbal social interaction. For example, research has suggested that American mothers' and toddlers' collaborative talks, such as those that support and confirm (e.g., "I know you can"), are related to better ToM development later at preschool age (Sung & Hsu, 2014). For both Hong Kong and U.K. families, when parents show greater inclinations to view their children having a mind of their own (also known as parental mind-mindedness), their children demonstrate better ToM understandings (Hughes, Devine, & Wang, in press). In sum, young children's learning to read minds seems to partially depend on their social experience. Both broader cultural influences and specific familial and school experiences may have effects on ToM learning.

# **Temperament**

#### Thomas and Chess Profiles

The pioneering work of child psychiatrists Alexander Thomas and Stella Chess in the New York Longitudinal Study brought widespread recognition that individual personality differences are evident at birth and do not simply emerge due

to varying parental practices. Since their introduction of the concept of temperament (Thomas & Chess, 1977; Thomas, Chess, & Birch, 1968, 1970; Thomas, Chess, Birch, Hertzig, & Korn, 1963), specific definitions have varied (see Shiner et al., 2012) but it is generally agreed that temperament refers to relatively stable behavioral differences among individuals that are genetically and biologically based. From parental interviews, Thomas and Chess proposed nine dimensions on which infants appeared to differ (activity, regularity, adaptability, approach-withdrawal, reaction intensity, mood, persistence, distractibility, and sensory threshold). Based on clustering of these attributes, they clinically identified three temperament constellations. Infants with an easy temperament eagerly approach and adapt to novelty, exhibit low-to-moderate intensity reactions, are generally positive in mood, and readily establish routines. In contrast, difficult infants reject novel experiences, display frequent and intense negative reactions, and exhibit irregularity in their daily patterns. Finally, slow-to-warm-up infants have low activity levels, low-intensity reactions, respond to novelty with mild negativity, and adapt to it slowly. Thomas and Chess acknowledged that temperament was not immutable; environmental qualities could moderate or heighten characteristics. Nonetheless, they argued that a basic constancy of attributes was seen for most children. In terms of the distribution of profiles among the 141 infants in their sample, they found that approximately 40% qualified as easy, 15% as slow-to-warm-up, and 10% as difficult (35% were unclassifiable) (Thomas et al., 1970).

In addition to formulating temperament profiles, Thomas and Chess proposed a connection to long-term adjustment. Of the nearly 30% of their sample who longitudinally showed clinical-level disturbances, those with a difficult constellation accounted for the largest proportion and those labeled slow-to-warm-up the next largest. An astounding 70% of difficult children, compared to 18% of easy participants, presented with problems requiring clinical intervention (Thomas et al., 1970). However, rather than suggesting that temperament alone predicted adjustment, Thomas and Chess astutely proposed the concept of *goodness-of-fit*. That is, how well a child's environment accommodates his/her dispositional makeup greatly influences healthy psychosocial adjustment. A given set of circumstances will not have an identical impact on all children. It is the severity and duration of dissonance between environmental demand characteristics and a child's temperamental qualities that predict the likelihood of ensuing problems (Thomas et al., 1968, 1970).

Thomas and Chess based their work on a homogeneous sample of predominantly Jewish, educated, middle- and upper-class New York City families. Although Thomas and Chess (1977) suggested that their dimensions and profiles could be used to characterize a range of populations, the ultimate utility of their approach began to be challenged (Sanson, Hemphill, & Smart, 2002). The broad typologies have not been consistently useful in capturing temperament differences in other cultures. For example, in one study of Italian infants (Axia & Weisner, 2002), an overwhelming majority (90%) were easy. Other work suggested that many

Chinese, Japanese, and Navajo neonates would be similarly characterized in this way (see Freedman & DeBoer, 1979), although much of this anthropological work preceded the popularity of Thomas and Chess' descriptions. Such findings not only implied that cultural differences in temperament exist, but also suggested that within some cultures the range of observed dispositional differences when using Thomas and Chess' broad typologies would be insufficiently narrow to study the role of temperament in developmental outcomes (Axia & Weisner, 2002).

The general consensus is that Thomas and Chess' dimensions and clusters are not universally applicable across cultures. One issue is that some traits may be interpreted and thus measured quite differently outside the U.S. For example, in a study of Malay infants (Bank, 1989), high sensory thresholds for responsiveness were not ascribed because infants and children were expected and presumed to be extremely aware of stimuli, especially anything uncomfortable. Malay parents also typically did not challenge infants' rejection of non-social experiences (e.g., new foods) because rejection was considered decisive; thus, the concept of adaptability may not have been comparably measured. A further issue is that components of the difficult profile might not be considered elements of diagnostic difficulty within a different culture. For example, in a study of "difficult" children across seven Western cultures, Super et al. (2008) found no association between young children's general mood and perceived difficulty among Italian parents. The researchers argued that Italian culture may view the display of frequent negative moods from a child as a positive sign of emotional accessibility. Even followup studies of U.S. samples have failed to support the constellations. For example, rhythmicity and intensity—key components of the original conceptualization of difficultness—did not consistently relate to its other components (Daniels, Plomin, & Greenhalgh, 1984). Thus, developmentalists today concur that infants differ in temperament both within and across cultures, but do not advocate the framework established by Thomas and Chess. Recall that even a large percentage of the original sample could not be categorized into one of the three profiles (Thomas et al., 1970).

Research on developmental outcomes soon suggested that the labels of the original clusters are inappropriately value-laden especially cross-culturally (Sanson et al., 2002). For example, in a study of working-class Puerto-Rican families in the U.S. (Korn & Gannon, 1983), characteristics of difficultness were not perceived as problematic and were not associated with later adjustment problems. Rather, because Puerto Rican parents made relatively few demands of their young children, the rearing environment did not conflict with the difficult constellation. Similarly, in his classic study of Masai infants in Kenya, DeVries (1984) also reported findings counter to Western expectations that infants with difficult temperaments are at greater risk for problems. On the contrary, mortality was greater for infants with an easy temperament because they received less attention and feeding compared to difficult counterparts. Such findings, however, lent strong support to Thomas and Chess' proposition of goodness-of-fit, i.e., that different temperament

characteristics are desirable depending on the context (Sanson et al., 2002) and that it is dissonance between environmental demands and temperament that leads to problems (Thomas et al., 1970). Despite the rejection of typologies outside of clinical circles, Thomas and Chess' conceptualization of the impact of temperament on a child's transactions with his/her environment is considered universally applicable both within and across cultures.

## A Modern Perspective on Temperament

In contrast to Thomas and Chess's clinical method, Mary Rothbart and her colleagues took a theoretical approach to identifying core constructs of temperament. Using a series of questionnaires developed to assess behavioral patterns in infants, toddlers, preschoolers, and school-aged children, a three-factor temperament structure emerged in data from infancy through childhood (Mervielde & De Pauw, 2012; Rothbart, 2007). Extraversion-surgency captures a tendency to approach rather than withdraw from novel situations and people, and includes impulsivity, activity, and high intensity positive affect. Negative affectivity captures a tendency for discomfort along with the full range of intense negative reactions such as anger, fearfulness, and sadness. Effortful control refers to behavioral or physiological processes involving self-regulation that can modulate reactivity. It includes inhibitory control and attentional focusing, but also tendencies to be aware of and derive pleasure from low intensity stimulation. Rothbart (2007) has argued that although individual variations in components are genetic predispositions, environmental influences can further alter individual characteristics.

When using translated questionnaires, researchers have often found similar broad dimensions of temperament in parental assessments across diverse cultures. Thus, despite minor variation in subcomponents, the overarching three-factor structure as denoted by Rothbart has emerged in reports by mothers of infants from communities in Japan, Poland, Russia (Gartstein, Knyazev, & Slobodskaya, 2005; Gartstein, Slobodskaya, Zylicz, Gosztyta, & Nakagawa, 2010), Italy (Montirosso, Cozzi, Putnam, Gartstein, & Borgatti, 2011), and both rural and urban regions of Ethiopia (Gartstein, Bogale, & Meehan, 2016). Researchers have also observed a similar basic structure of temperament characteristics describing toddlers from Chile, Poland, and South Korea (Farkas & Vallotton, 2016; Krassner et al., 2017) and preschool- and school-aged children from China, Japan, and Australia (Ahadi, Rothbart, & Ye, 1993; Rothbart, Ahadi, Hershey, & Fisher, 2001; Sanson, Smart, Prior, Oberklaid, & Pedlow, 1994). In most of these studies, the three broad dimensions based on parental reports were extraversion-surgency, negative affectivity, and effortful control. Thus, when taking an etic approach, where instruments devised in the U.S. are translated and applied directly to another culture, similar broad dimensions of temperament can describe infants and children within other cultures. However, these efforts have not resulted in identifying temperament characteristics or constellations that are unique to diverse cultures.

In taking an emic approach to potentially capture culture-specific aspects of temperament, Shwalb, Shwalb, and Shoji (1994) asked Japanese mothers to freely describe their infants' behavioral styles; a standardized inventory followed. Many dimensions that emerged from analyses were similar to those found when using Western instruments. Yet, unique dimensions also appeared such as dependency/indulgence, which may be a reflection of the cultural emphasis on symbiotic harmony (Rothbaum, Pott, Azuma, Miyake, & Weisz, 2000) and on intense relatedness within Japanese mother-infant dyads. Even for dimensions that were conceptually similar to those found in Western research, the content differed. For example, "buries head in neck when embraced" is an item for assessing sociability. The findings suggest that the perceptual salience of infant behaviors varies depending on culture, as these Japanese mothers focused on behavioral tendencies that related to the mother–child relationship.

Cultures vary in their temperament ideals and parents are indeed motivated to observe child characteristics that are culturally desirable (Gartstein et al., 2016; Kohnstamm, 1989). For example, in Russia, happiness has been perceived as a transient, fleeting phenomenon that should be concealed from others. Moreover, Russians have long held attitudes of acceptance toward adversity and negative emotions that come along with it. Thus, it is not surprising that compared to American parents, Russian parents reported lower positive emotionality and higher negative emotionality in their infants (Gartstein et al., 2010; Gartstein, Slobodskaya, & Kinsht, 2003). Anchored in Asian cultural ideals for compliant, obedient, controlled, and reserved behavior, Chinese mothers rated their infants as more fearful and prone to distress yet also more soothable and persistent in orienting than did parents from the U.S. and Spain (Gartstein et al., 2006; Hsu, Soong, Stigler, Hong, & Liang, 1981). Chinese mothers and fathers also rated their preschoolers as less emotional than their American counterparts (Porter et al., 2005). More recently, Krassner et al. (2017) found an analogous pattern in parental reports of South Korean toddlers who were perceived as somewhat high in fear, discomfort, and perceptual sensitivity yet also higher in effortful control, particularly inhibitory control and attentional focusing, compared to Polish and U.S. counterparts. Similarly, Japanese mothers perceived their infants as displaying more fear (Gartstein et al., 2010; Slobodskaya, Gartstein, Nakagawa, & Putnam, 2012) and their preschoolers as more withdrawal-oriented and expressing less positive affect than did American mothers (Windle, Iwawaki, & Lerner, 1988).

Although the above differences in parental perception of child temperament may be tainted by cultural values, standardized laboratory observations have confirmed cultural differences. Most researchers agree that Chinese, Japanese, and Korean infants and toddlers are less behaviorally reactive, excitable, and expressive than their American and European counterparts (e.g., Camras et al., 1998; Kagan et al., 1994). Genetic differences may account for the distinction (Kagan, 2009).

Recent studies using molecular genetic techniques have explored this argument (Putnam & Gartstein, 2017). Consistent with previous findings, when responding to inoculation, Japanese 4-month-olds showed less intense initial negative affect and took less time to quiet than American infants. Nonetheless, their cortisol response was greater than that of American infants (Lewis, Ramsay, & Kawakami, 1993). This finding suggests that Japanese infants are not less physiologically reactive than their American counterparts; they are simply less behaviorally reactive. Differences in cultural values and socialization practices can contribute to variations in reactivity. For example, maternal encouragement of interdependence and thus closer infant-mother proximity (e.g., Rothbaum et al., 2000) may lead to Japanese infants' reduced signaling of distress compared to European-American counterparts (Lewis et al., 1993).

Indeed, mothers' interaction styles that are unique to their cultures influence the development of self-regulation (Feldman, Masalha, & Alony, 2006; Harkness et al., 2007). Consistent with this argument, researchers studying Dutch infants (Sung, Beijers, Gartstein, de Weerth, & Putnam, 2015) have found higher perceived regulatory capacity, particularly soothability and low-intensity pleasure, compared to parental ratings of U.S. infants even though Dutch infants also appear to display more frequent smiling and laughter. This finding is in keeping with well-established reports of Dutch parents' display of relatively lower levels of arousing stimulation and emphasis on regularity and rest rather than novelty or intense stimulation (Harkness et al., 2007; Sung et al., 2015). Similarly, cultural styles of caregiverinfant interaction likely explain fine-grained nuances that emerge among subdimensions of other broad temperament factors such as extraversion-surgency. For example, although Italy and the U.S. share similarities in terms of industrialization and Westernization, Italian parents promote comparatively more affiliation (Harkness et al., 2007). Thus, Italian infants and toddlers have been rated consistently as showing more cuddliness that expresses gratification from close contact with and molding of their bodies to that of their caregivers (Cozzi et al., 2013; Montirosso et al., 2011). American parents, on the other hand, endorse and promote demonstrations of positive excitement and reactivity in their offspring, as these are in keeping with the value placed on individual expression and extraversion. Thus, it is no surprise that U.S. infants and toddlers have not only received higher ratings on high-intensity pleasure compared to Italian, Russian, and Japanese counterparts (Cozzi et al., 2013; Gartstein et al., 2010; Montirosso et al., 2011) but these infants are also consistently rated as exhibiting greater positive vocal reactivity (Gartstein et al., 2003, 2010; Montirosso et al., 2011; Sung et al., 2015) and motor activity levels (Montirosso et al., 2011; Sung et al., 2015) compared to Italian, Dutch, and Russian counterparts.

The relation between temperament and developmental consequences has revealed both universal patterns and cultural differences. In terms of commonality, dispositional regulation and emotionality are consistently linked to social and emotional outcomes. Similar to European-American children, low negative

emotionality combined with high regulatory control predicted greater social competence and behavioral adjustment in Chinese (Zhou et al., 2008; Zhou, Eisenberg, Wang, & Reiser, 2004) and Indonesian children (Eisenberg, Liew, & Pidada, 2004; Eisenberg, Pidada, & Liew, 2001). The linkage of low positive emotionality to internalizing problems, and low regulation combined with high negative emotionality to externalizing problems, also are consistently found in both American and Chinese school-aged children (Zhou, Lengua, & Wang, 2009).

Nevertheless, the relation of temperament to adjustment also has demonstrated cross-cultural differences. For example, based on teachers' reports, Chinese children with externalizing problems displayed higher positive and negative emotionality than those with no adjustment problems, whereas the two groups did not differ among European-American children (Zhou et al., 2009). In addition, the three core dimensions of temperament exhibited different association patterns among American and Chinese children. American children who were high in effortful control tended to exhibit lower negative affectivity, whereas Chinese children who were high in effortful control were more likely to show lower extraversion-surgency (Ahadi et al., 1993; Rothbart, 2007). Such patterns suggest that developmental outcomes are guided by cultural preferences: temperament characterized by low distress is favored in American culture, whereas low outgoing behavior and high inhibition are traditionally valued in Chinese culture.

Indeed, depending on a culture's values and socialization goals, a child's temperamental predisposition toward shyness-inhibition can contribute to either maladaptive or adaptive developmental outcomes. For example, parents, teachers, and peers in North America evaluate shy-inhibited behavior as a sign of social incompetence as these cultures value competitiveness, confidence, and assertiveness. Thus, researchers have found shy-inhibited children in Canada and the U.S. to often experience difficulties such as peer rejection and, ultimately, long-term adjustment problems. In contrast, shyness-inhibition customarily has been viewed by those in Asian countries such as Korea or China as a positive indicator of social mastery and maturity because obedient and controlled behavior have traditionally been valued (Chen, 2011; Yang, Chen, & Wang, 2015). Thus, shy-inhibited Chinese children have been found to display good adjustment such as peer acceptance and academic achievement (Chen, DeSouza, Chen, & Wang, 2006; Chen, Wang, & Cao, 2011; Yang et al., 2015). Note that Chen and colleagues have found the cultural preference for shy-inhibited behavior to hold only for rural Chinese children. As China has moved to a competitive market-oriented economy, both adults and children in its urban centers have increasingly valued assertiveness (Chen et al., 2011; Yang et al., 2015). Slobodskaya et al. (2012) speculated that a similar global trend toward Western attitudes about surgency may potentially explain their unique observation of decreasing age-related differences in surgency among Russian, Japanese, and U.S. children across the first few years of life.

#### Attachment

# Attachment Theory

Attachment refers to the young child's emotional tie to his/her primary caregiver and was theorized by John Bowlby (1969) to have a lasting impact on psychosocial development. Bowlby argued that an infant is biologically predisposed, as a result of natural selection, to form an attachment because it motivates proximity maintenance to the caregiver, facilitating protection during times of threat. Ultimately, the bond includes cognitive representations or "internal working models" of the attachment figure, self, and their relations. Constructed in the context of child-caregiver interactions, an internal working model encompasses expectations, strategies, and heuristics for relationships, which together form the basis for how an individual maintains an intimate connection with others (see Bretherton & Munholland, 2008). Moreover, Bowlby's (1969) theory of attachment underscores the role of the caregiver to serve as a "secure base" from which offspring can explore and learn about the environment.

Bowlby (1969) distinguished four attachment phases: (a) undifferentiated reactivity (0 to 2–3 months); (b) discriminating social responsiveness (3 to 6–7 months); (c) clear-cut attachment (7 months to 3 years); and, finally, (d) a goal-corrected partnership (beginning around age 3). Attachment research has focused predominantly on phase three when infants demonstrate active maintenance of proximity and physical contact with a specific figure as well as evidence of using the figure as a base from which to explore. It is also when infants display separation and stranger anxieties. Attachment theory proposes important flexibility in the nature of the attachments that are formed in phase three as a result of caregiving (Ainsworth, 1967; Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969). The most widely used assessment of attachment variation is the Strange Situation, developed by Mary Ainsworth (1967; Ainsworth et al., 1978). In this procedure, an infant (12–24 months) is faced with an unfamiliar setting, a stranger, and brief separations from his/her caregiver. Three attachment patterns are traditionally classified (Ainsworth et al., 1978). Infants who express their distress, readily seek and achieve comfort from their caregivers upon reunion, and use the caregiver as a secure base for returning to exploration are classified as secure. Insecurely attached infants fail to use their attachment figure as a secure base for active exploration. Moreover, infants who convey little distress and avoid the caregiver upon reunion are classified as insecure-avoidant. Those who seek much proximity/contact with their caregivers yet resist interaction, exploration, and feeling comforted are classified as insecure-resistant. They are often extremely distressed when separating from the caregiver; however, their reaction to reunion gives an impression that they find little security in the caregiver's return. According to a classic meta-analysis by van IJzendoorn and Kroonenberg (1988), the aggregate global distribution of patterns is approximately 65% secure, 21% insecure-avoidant, and 14% insecure-resistant.

## Limits to the Universality of Attachment Theory?

Ainsworth's (1967) groundbreaking observations of Ugandan mothers and infants supported Bowlby's theory that infants develop attachment relationships in the phases described and that the majority develop a secure attachment with their primary caregivers, typically mothers. Researchers have argued that a substantial core of attachment organization is exempt from cultural influence. There are four assumptions about the cross-cultural invariability of attachment, including its nature (i.e., universality hypothesis), optimality (i.e., normativity hypothesis), origins (i.e., sensitivity hypothesis), and consequences (i.e., competence hypothesis) (e.g., Mesman, van IJzendoorn, & Sagi-Schwartz, 2016; van IJzendoorn & Sagi, 1999; van IJzendoorn & Sagi-Schwartz, 2008). To date, available evidence both supports and questions some of these core assumptions.

#### Universality-nature hypothesis

Scholars believe attachment to be a universal phenomenon—all normally developing infants will develop attachment to their primary caregivers. Even reared in a communal environment with multiple caregivers, infants become attached to one or more specific caregivers, and most often to their mothers. In fact, a multitude of studies in Africa, East Asia, Latin America, mid-East, and Pacific Islands with children and caregivers from diverse childrearing situations ranging from hunter—gatherer societies featuring a network of child and adult caregivers, to affluent and deprived urban environments, and to child-policy governed countries (e.g., the former one-child policy in China) have indeed confirmed this assumption (for a review, see Mesman et al., 2016). Furthermore, the different patterns of secure, resistant, and avoidant attachments are present not only in Western but also in non-Western cultures. Thus, the universality hypothesis is deemed strongly supported.

### Normativity-optimality hypothesis

The essence of an infant's secure attachment to his/her primary caregiver is theorized to be captured by the infant's use of the caregiver as a secure base from which to safely explore the environment (Ainsworth et al., 1978; Bowlby, 1982). Both field and laboratory studies have demonstrated that the secure base phenomenon is observable in infant-mother dyads and widespread, from industrialized nations to developing countries, and to traditionally isolated societies (see Mesman et al., 2016). Mothers and experts in different cultures also provide similar descriptions for an ideal child, who is a securely attached child using his/her mother as a base from which to explore the surroundings and as a haven of safety (Posada et al., 1995; Posada et al., 2013). Nevertheless, several cross-cultural researchers have contended that the focus on secure-base phenomena to represent attachment quality places a biased emphasis on European-American values of individuation and independence (e.g., Harwood, 1992; Rothbaum et al., 2000; Takahashi, 1990).

In fact, cultures differ widely in the extent of exploration in everyday situations. For example, because of significant danger in immediate living situations (e.g., snakes), Dogon infants of Mali in West Africa are generally not permitted to explore freely (True, Pisani, & Oumar, 2001). The behavioral manifestation of the secure base phenomenon in infant-mother dyads also varies across cultures. For example, whereas American infants increase maternal physical contact in an unfamiliar situation, infants in Germany increase visual reference to mothers (Zach & Keller, 1999). Finally, the link between attachment and dependence, rather than exploration, is more primary in non-Western cultures (e.g., Mizuta, Zahn-Waxler, Cole, & Hiruma, 1996). For example, Puerto Rican mothers prefer infants whose behaviors are inclined toward proximity maintenance rather than exploration (Harwood, 1992). Thus, even though infants do seek out their primary caregivers for help when threatened, the secure base behavior appears to be largely influenced by the culture and expressed in a culture-specific form.

Attachment theorists have further posited that across cultures the majority of infants living in a normal environment are securely attached. Strange Situation assessments gathered from more than 20 countries indeed indicate that approximately two-thirds of infants are classified as securely attached (van IJzendoorn & Kroonenberg, 1988; van IJzendoorn & Sagi, 1999). Attachment theorists view secure attachment as an optimal functioning of the infant-mother relationship. Secure attachment reflects an appropriate balance between autonomy and relatedness in the relationship, whereas insecure-avoidance represents high autonomy with low relatedness and insecure-resistant reflects the reverse, and both indicate non-optimal functioning of the relationship (Lamb, Thompson, Gardner, & Charnov, 1985). Nevertheless, significant cross-cultural differences have been found in the distribution of attachment patterns, with more insecure-resistant infants in China, Japan, South Korea, and Israel and more insecure-avoidant infants in Germany (e.g., Archer et al., 2015; Grossmann, Grossmann, Spangler, Suess, & Unzner, 1985; Jin, Jacobvitz, Hazen, & Jung, 2012; Miyake, Chen, & Campos, 1985; Sagi et al., 1985; Sagi, van IJzendoorn, Aviezer, Donnell, & Mayseless, 1994; Zreik, Oppenheim, & Sagi-Schwartz, 2017).

Several cross-cultural researchers have challenged the assumption that there is a single universal pattern of optimal functioning. They believe the labeling of a particular pattern as secure is merely a judgment regarding prevailing cultural ideals for child rearing and development (e.g., LeVine & Norman, 2008). For example, while self-reliance and obedience in infants are highly encouraged by German parents, interpersonal closeness and affective communication are discouraged. An insecure-avoidant attachment pattern exemplifying these ideal behaviors is likely to result (LeVine & Norman, 2008). By contrast, interpersonal harmony is emphasized in Japan (Rothbaum et al., 2000). Among Japanese infants, an insecure-resistant pattern may simply capture heightened emotional closeness and dependency in relating to their mothers. Similarly, the low rates of avoidant infants in collectivist cultures, such as China and South Korea, may be due to cultural customs that encourage

closeness and indulgence in infant-mother relationships and infants' rare exposure to separation from mother (Archer et al., 2015; Jin et al., 2012). Furthermore, in some traditional African communities, such as the Dogon subsistence farmers in Mali, a social network of multiple caregivers among family members, including older siblings, keep constant and close physical contact with infants. Thus, these infants do not approach their mothers during reunion as readily as infants in other cultures do. Also, secure infants often reach out their hand to receive a handshake by caregivers (True et al., 2001). Put together, it appears that infants and mothers in different cultures achieve the secure-base function in different ways. Finally, the cultural-specific pattern may be beyond infancy. For example, using family drawings as a measure for attachment quality instead of the Strange Situation procedure, a recent study (Gernhardt, Keller, & Rübeling, 2016) found that the majority of drawings by 6 year-olds in middle-class families from Berlin, Germany, are characterized by secure attachment patterns (e.g., the child is next to his/her mother and/or father with positive expressions and tall figures in similar height), whereas those by the majority of children in rural Nso farming families from Cameroon are featured by signs of insecure attachment relationships (e.g., the child is next to a non-relative, the child, father, and/or mother is frequently excluded, and family members are depicted in small figures with less detail and more neutral facial expressions). The researchers suggested that attachment (in) security may not be defined and expressed the same way in different cultures. Cultural differences in these drawings simply reflect differences in children's social environments and socialization experiences. For example, whereas the Berlin mothers from nuclear families emphasize a socialization orientation of individual autonomy characterized by personal assertiveness, uniqueness, and self-expression, the Nso mothers from rural farming families focus on a group harmony orientation characterized by sharing, obedience, respect, and social harmony. Thus, it appears that the optimal attachment organization may be constructed on the basis of cultural beliefs and socialization goals.

#### Sensitivity-origins hypothesis

One of the central tenets of attachment theory is that variations in caregivers' sensitivity predict different attachment patterns (Ainsworth et al., 1978). Specifically, sensitive parenting is expected to play a vital role in promoting attachment security across cultures. Indeed, a comprehensive meta-analysis confirmed that maternal sensitivity is modestly yet significantly associated with infant attachment security (De Wolff & van IJzendoorn, 1997). Moreover, observations based on middle-class and very poor families in Colombia (Posada et al., 1999; Posada et al., 2002), chronically underweight Chilean infants living in urban poverty (Valenzuela, 1990, 1997), Dogon infants in West Africa whose mothers have experienced multiple offspring losses (True et al., 2001), infants and toddlers of well-educated Japanese and South Korean mothers (Jin et al., 2012; Vereijken, Riksen-Walraven, & Kondo-Ikemura, 1997), and preschoolers in Colombia,

Mexico, Peru, and the U.S. (Posada et al., 2016) all consistently reported that maternal sensitivity was associated with secure attachment.

Descriptions about the ideal mother show some convergence across many cultures (Mesman et al., 2016), yet are broader in behavioral scope compared to Ainsworth's notion of timely and appropriate responsiveness to signals. Mesman et al., in a study of 26 cultural groups in 15 countries, found that sensitivity beliefs still varied somewhat by cultural group, with rural, poorer, mothers with multiple children less likely to match experts' descriptions of ideal or sensitive mothering. Moreover, agreement among rural mothers was less than that between urban mothers; thus, indicating that rural locale alone did not predict shared beliefs (Mesman et al., 2016). Several cross-cultural researchers (e.g., Keller, 2007; Rothbaum et al., 2000; Rothbaum & Morelli, 2005) have questioned the Western conceptualization of sensitivity as a universal ideal for parenting. They have argued that different maternal behaviors can have the same function in different cultural contexts and appropriate responding to infant signals may be different (Bornstein, Cote, Haynes, Suwalsky, & Bakeman, 2012; Keller, 2013). For example, Cameroonian rural Nso mothers tend to respond to their infants' vocalization with physical stimulation (e.g., touching or stroking), whereas German mothers tend to imitate their infants' vocalization or smile at their infants (Kärtner, Keller, & Yovsi, 2010). Similarly, although mothers in the U.S., Fiji, and Kenya all similarly respond to infant bids in a contingent manner, they selectively respond to different bids by infants, with the greater tendency for American mothers to respond by mirroring their infants' vocal and facial affect than Fijian or Kenyan mothers (Broesch, Rochat, Olah, Broesch, & Henrich, 2016).

As interpretations of sensitive caregiving incorporate varying cultural socialization goals, what it means to be a sensitive mother may be different in different cultures. For example, in the eyes of attachment theorists, mothers in both Japan and Puerto Rico may seem insensitive: Japanese mothers perhaps over-indulgent and Puerto Rican mothers over-controlling (Harwood, 1992; Rothbaum et al., 2000). Yet, both styles may be appropriate for promoting socialization goals other than individuation and autonomy. In fact, greater maternal physical control was associated with secure attachment in middle-class Puerto Rican infants (Carlson & Harwood, 2003). From a sociocultural perspective, Puerto Rican mothers' persistent physical control is viewed as effective in raising a child well accepted by the community (Harwood, 1992). Nso mothers also believe that a caretaker-centered concept of responsive control is the best parenting strategy for promoting optimal outcomes of obedience, respectfulness, and responsibility in children (Yovsi, Kärtner, Keller, & Lohaus, 2009).

Finally, the assumed association between maternal sensitivity and child security in different cultures has not been consistently supported. For example, a cross-culture study found that maternal sensitivity, and specifically, maternal behaviors contributing to harmonious child–mother interactions and providing secure base support for the child, were significantly and consistently associated with child security

among American, Colombian, Peruvian, and Mexican immigrant preschoolers (Posada et al., 2016). In contrast, another study showed that the sensitivity-security link was significant among Jewish Israeli infant-mother dyads but not among Arab Israeli dyads (Zreik et al., 2017). It is speculated that maternal sensitive responding to infant distress as assessed in the Strange Situation procedure may be more salient and generalizable to other caregiving contexts (e.g., teaching and playing) for Judeo-Christian families than Muslim families. Taken together, an appreciation for culture-specific ideals of sensitive caregiving appears to be an important foundation for a better understanding of the sensitivity-security link.

#### Competence-consequences hypothesis

Bowlby (1969) and Ainsworth et al. (1978) hypothesized that securely attached infants would become more socially and emotionally competent children and adults than those who were insecurely attached. Studies conducted in industrialized, independent cultures support the competence hypothesis (cf. Groh et al., 2014). However, cross-cultural evidence supporting the competence hypothesis is still insufficient (Mesman et al., 2016). Rothbaum and colleagues(2000; Rothbaum&Morelli, 2005) have argued that the security-competence link needs to be considered within cultural contexts. For example, secure attachment has been theorized to be linked to direct communication and emotional openness (e.g., Bretherton, 1990). Yet, in cultures such as Puerto Rico, attachment security is associated with respect, obedience, and calmness, rather than self-expression (Harwood, 1992). And in Japan, coordinating one's needs with those of others is seen as essential to the goals of interpersonal unity and harmony. Thus, negative feelings are kept to oneself or expressed indirectly. Dependence on others is also more likely to be associated with attachment competence as prescribed in Japanese culture (Rothbaum, Kakinuma, Nagaoka, & Azuma, 2007). Thus, as with other propositions, the impact of attachment organization needs to be fully explored from a sociocultural as well as universal perspective.

### Conclusion

Traditionally, the field of developmental psychology has been dominated by knowledge generated from Western European or European-American theorists and researchers studying middle-class children of similar heritage. Fortunately, the last half-century has seen an exploding interest in moving beyond ethnocentric assumptions of generality and toward an appreciation of child development within a wide range of human settings. Although the state of our knowledge is far from ideal, the field has made great progress in identifying and understanding similarities and variations in the development of children across the world.

A review of several topics popularly addressed in undergraduate courses leads to a conclusion often applied in reviews of specific developmental domains—that is, child development is neither entirely uniform around the world, nor totally culturally unique (Berry et al., 1992). Commonalities have emerged within each content area we have discussed. As Piaget observed, the development of cognition undergoes some remarkably similar transitions and tendencies, particularly during early childhood. Modern inquiry has shown us that children around the world begin to reason about others and remember their own personal histories within characteristic time frames and phases. Likewise, we are reminded that it is through conversations and interactions with parents and others in their communities that all children learn how to pay attention, remember, and think about others. We also see that children worldwide display biologically-based dispositional differences that affect their socialization experiences. The same temperamental predisposition can contribute to adaptive or maladaptive interactions with others, depending on culturally-associated positive or negative connotations and meanings. Thus, as Thomas and Chess argued, and modern researchers have observed, the fit between children's biology and cultural ideals—or lack thereof—plays a role in the consequent adjustment of children. Finally, as Bowlby and Ainsworth elaborated, all young humans face the essential task of forming an attachment to their caregivers and thus develop strategies and expectations for close relationships and for relating to their social world.

A review of research across cultures also elucidates some of the inadequacies and errors associated with our most popular assumptions regarding regularities in children's development. As Super and Harkness (1994) remarked, "In all societies, most children grow up to be competent adults; an important contribution of systematic cross-cultural comparisons has been to show how competence can be variously defined and how children come to achieve it" (p. 96). Indeed, there are differences in developmental goals, practices, and outcomes across cultures. Thus, different cognitive tendencies and abilities develop among children in different settings depending on the demands placed on them. For example, ideal reasoning and cognitive problem-solving skills vary according to culture, as do emerging patterns of attending, remembering, and understanding the minds of others. Further, by determining values and beliefs, culture influences how caregivers perceive, interpret, and attempt to shape the expression of constitutionally based behavioral tendencies. Hence, many European-American preferences such as heightened positivity or energetic expressiveness are not equally desired or promoted by all cultural communities—including other Western cultures. Finally, we recognize the potential for cultural conceptions and expressions of caregiver sensitivity to differ. We also realize the potential for diverging cultural models of security and human relationships and, likewise, for different developmental sequelae to unfold as a result of these models.

Today, scholars no longer question whether culture plays a role in various aspects of child development. In fact, some argue that in domains such as cognition,

child development cannot be fully or even meaningfully understood outside its cultural context. Thus, beyond simply identifying global similarities and differences, the field has come to appreciate the cultural structuring of child development (Super & Harkness, 1997) and now recognizes that significant variations must ultimately be understood within the cultural context in which they are observed. Different paths of development are not arbitrarily linked to different socialization experiences. Rather, rearing practices emerge from the settings and values of the larger cultural community. As Super and Harkness (1986, 1997) articulated in their conceptualization of the developmental niche, the subcomponents operate as an integrated system. Interconnections between cultural practices, beliefs, and settings must be understood in order to appreciate the variations in developmental patterns and outcomes. Otherwise, a decontextualized approach offers little meaning (Super & Harkness, 1997).

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# Adolescent Development in a Cross-Cultural Perspective

Judith L. Gibbons and Katelyn E. Poelker

Adolescence is a time of change, vulnerability, and opportunity, and like all stages of human development, it is culturally variable (UNICEF, 2011). The life of an adolescent boy who herds cattle in Kenya differs greatly from that of a girl competing for class honors in a challenging school in Singapore. Despite variation, when defined as the period extending from the onset of puberty until the assumption of adult responsibilities, an adolescent life stage is present in almost all societies, both preindustrial and modern (Schlegel & Barry, 1991). In the Western and urban world today, adolescence comprises the developmental period from approximately ages 10 through 19.

There are about 1.2 billion adolescents worldwide and they comprise 16% of the world's population (UNICEF, 2016a). South Asia alone is home to 340 million adolescents, and in Sub-Saharan Africa, youth ages 10–19 comprise 23% of the population (UNICEF, 2016a). Countries with a "youth bulge" (resulting from the intersection of low mortality and high fertility) face both unique challenges and growth opportunities (McIntosh, 2009; Ortiz & Cummins, 2012; UNICEF, 2016a). Challenges are numerous and largely economic—providing quality education and meaningful employment. Economies may also benefit from this bulge as young people strive for a share of global wealth and may drive economic growth if a country commits the necessary resources (McIntosh, 2009).

Although the overall proportion of adolescents in the population is on the decline globally, the actual number is increasing—a trend that is expected to continue until 2050 (UNICEF, 2016b). Thus, as a demographic group, adolescents have strength in numbers. Furthermore, as the culture bearers and leaders of tomorrow, these young people deserve our resources and respect (UNICEF, 2011).

In developmental psychology, adolescence is defined as the empirical study of youth in the second decade of life including advances in the domains of biological/physical, cognitive, and socio-emotional development (Arnett, 2012). The domains overlap as well, yielding advances at the intersection of multiple developmental domains. For example, adolescents have acquired the cognitive ability to think abstractly and hypothetically—cognitive skills not yet mastered by children (Blakemore & Choudhury, 2006). Adolescents can then use those skills to create goals for the future; those goals reflect the values of their cultures, families, and peers (Gibbons & Stiles, 2004).

The boundaries of adolescence, both the onset and the conclusion, are informed by culture. The timing of pubertal onset, the universal catalyst of adolescence, is determined in part by cultural features, such as diet and healthcare access. Perhaps even more importantly, adolescents' responses and experiences relating to puberty are also culturally-bound. For some adolescents, this occasion is marked by a ritual to recognize their newfound adult status in the community (e.g., quinceañera celebrations in Latin America). The end of adolescence, defined by many as the assumption of adult roles, is most certainly culturally dictated. Some young people, mainly in WEIRD societies (Western, Educated, Industrialized, Rich, and Democratic; Henrich, Heine, & Norenzayan, 2010), are delaying the adoption of adult roles by experiencing an emerging adulthood (Arnett, 2000)—a transitional period between adolescence and adulthood. Many argue, though, that an emerging adulthood is a privilege reserved for the wealthy in many of the world's countries because only some enjoy the luxury of prolonged identity development and the postponement of adult responsibilities (Galambos & Martínez, 2007). What unfolds between the beginning and the end of adolescence is also culturally-dictated, defined by familial traditions, peer groups, local customs, ethnicity, economic resources, and educational opportunities, as well as the adolescent's own values and beliefs.

Despite the undeniable influence of culture on development, developmental psychology is still limited in its empirical investigations of youth in non-WEIRD cultures. Over 90% of the world's adolescents live in the majority world, but most research is carried out with adolescents in the minority world (Raffaelli, Lazarevic, Koller, Nsamenang, & Sharma, 2013). Nielsen, Haun, Kärtner, and Legare (2017) have urged developmental scientists to consciously work against the cultural sampling bias evident in the field. Thus, in this chapter, we explore what it means to be an adolescent using the three domains of development—biological, cognitive, and socio-emotional—through a cultural lens to reveal similarities and differences in the adolescent experience. In short, our goal is to explore the close connections between adolescent development and cultural context. To the extent possible, we focus on emerging knowledge about adolescent development in the majority world (Poelker & Gibbons, 2016) and how that knowledge contradicts assumptions about adolescent development based on WEIRD samples.

## **Biological and Physical Development**

### Adolescent Health

Adolescents face many health challenges unique to their developmental period. They must navigate puberty and address threats to their reproductive and sexual health, including adolescent pregnancy. Furthermore, adolescents are actively constructing a sexual identity and for the first time many are grappling with their sexual orientation, which is a particular challenge when it falls outside the heterosexual norm in many cultures. In 2012, road accidents, AIDS, suicide, respiratory infections, and interpersonal violence were the top causes of adolescent death, in that order (UNICEF, 2016b). Many of those causes are preventable, suggesting that an increased investment of resources in preventing those risks would likely help more adolescents live to adulthood. Furthermore, establishing healthy habits during adolescence reduces the likelihood that youth will suffer from noncommunicable diseases like heart disease in adulthood (Every Woman Every Child, 2015). For example, the majority of the world's adolescents (80%) do not engage in sufficient physical activity (Every Woman Every Child, 2015). For UNICEF's Executive Director, Anthony Lake, the time to invest in the world's adolescents is now—"Surely, we do not want to save children in their first decade of life only to lose them in the second" (UNICEF, 2011, p. iii).

It is also important to consider gender differences with respect to adolescent health challenges; girls ages 15–19 are most likely to die from pregnancy and child-birth complications, while older boys most frequently die because of violence (World Health Organization [WHO], 2017). Thus, when designing interventions aimed at improving adolescent health worldwide, gender must be considered.

## Puberty

Most basically, puberty signifies the beginning of adolescence and the signs of puberty vary by gender (Boxer, Tobin-Richards, & Pederson, 1983). For girls, many define menarche, or a woman's first menstrual period, as a critical milestone and a primary characteristic of pubertal development because it relates to reproduction. Secondary characteristics (those not directly related to reproduction) for girls include the development of breast buds and pubic hair. For boys, a primary characteristic of puberty is spermarche (or first ejaculation). Secondary characteristics include the growth of pubic hair and a deeper voice. Pubescent girls and boys also experience a growth spurt, although the timing varies by gender, with the spurt beginning and ending earlier for girls than boys. When adolescents in Nigeria and Kenya were asked about what they considered as the first signs of puberty, girls commonly mentioned breast development (more so than menstruation) and boys

reported vocal change (Bello et al., 2017). Adolescents from both countries desired more privacy as a way to cope with their developing bodies. Parents wanted their children to be prepared for and educated about those bodily changes. Furthermore, parents sought to be a resource for any challenges their children encountered.

Perhaps what is most culturally variable about puberty is the timing and the family and community's response to its arrival. Many young people in minority world countries experience puberty earlier today than they did several decades ago and earlier today than their peers in majority world countries. Known as the secular trend, scholars cite access to better health care and nutrition as driving forces (Gluckman & Hanson, 2006). In girls, the onset of menarche occurs earlier in wealthier countries as younger girls reach the threshold of body fat that is necessary for menstruation to begin because they are healthy and well-nourished. In addition to between-country variability in the timing of puberty, there is also evidence of within-country differences with respect to socio-economic status (Eveleth & Tanner, 1990).

Furthermore, some societies hold ceremonies that acknowledge the onset of puberty, sometimes called coming of age ceremonies or rites of passage (Markstrom & Iborra, 2003). In the 186 traditional cultures included in Schlegel and Barry's 1991 analysis, most had a ceremony to recognize the start of puberty. As described by Margaret Mead (1928) in her account of adolescence in Samoa, boys would undergo extensive tattooing to signify their manhood. Although the practice's popularity has dwindled due to globalization, higher secondary education rates, and the influence of Christian missionaries, there are reports of a resurgence among men to illustrate pride in their cultural heritage (Arnett, 2012; Coté, 1994). The *quinceañera* in Mexico and other Latin American cultures is a ceremony in honor of a girl's 15th birthday that includes religious elements and celebration; it signifies her debut as a woman and as an adult member of society (Davalos, 1996). Another example, the *Kinaaldá*, comes from the Navajos in the U.S (Markstrom & Iborra, 2003). Such formal and grandiose celebrations are in stark contrast to cultures in which puberty is rarely discussed.

## Adolescent Pregnancy

As is the case with many health disparities, adolescent pregnancy rates are closely connected to economic resources. For example, an adolescent girl from a family among the poorest 20% of households is three times more likely to get pregnant than her peer in the wealthiest 20% of households in that country (United Nations Population Fund, 2017). Rural girls are also more likely than their urban counterparts to become teenage mothers. Adolescent pregnancy is particularly prevalent in African and South Asian and Southeast Asian countries (United States Aid for International Development, 2017).

For teenage mothers in Latin America, the challenges of being a young mom are compounded by poverty and *machista* culture (D'Arcy, 2017). Christian Rodriguez's photographs from 10 Latin American countries depict young mothers in school uniforms sitting on their beds surrounded by stuffed animals, a clear reminder that the mothers are still children themselves (D'Arcy, 2017). Other young moms have discontinued their studies but report dreams of improbable futures as physicians or veterinarians.

Consequences of adolescent motherhood have implications for all developmental domains. For example, adolescent mothers, compared to their older counterparts, are more likely to experience health complications in childbirth or maternal death (United Nations Population Fund, 2017; United States Aid for International Development, 2017). Babies born to adolescent mothers are also more likely to experience health challenges such as low birthweight and premature birth (United States Aid for International Development, 2017). Adolescent parents are also more likely to drop out of school (mothers, in particular), which has long-term consequences for their future earning potential. Not surprisingly, then, there is a positive correlation between a country's rate of teenage pregnancy and gender wage inequality. Education is considered a protective factor against teenage pregnancy—the longer a girl stays in school, the less likely she is to get pregnant (United Nations Population Fund, 2017). Evidence from South Africa suggests negative educational and economic consequences for teenage fathers as well (Swartz & Bana, 2009). The impact on fathers has been incorporated into UNFPA's guidelines for reducing adolescent pregnancy (United Nations Population Fund, 2013).

## Sexually Transmitted Infections (STIs) and Sexual Education

Adolescents are at a disproportionately high risk for sexually transmitted infections (STIs), with youth accounting for half of all new HIV infections (United Nations Education, Scientific, and Cultural Organization, 2015). But the concerns associated with adolescent STIs are far more complicated than statistics alone. For example, in many countries talking about sex and reproductive health is taboo, so adolescents are not properly educated on the transmission of sexually transmitted infections (UNICEF, 2011). Thus, comprehensive sex education is essential for prevention of STIs and unplanned pregnancies (Every Woman Every Child, 2015).

In a study with Turkish adolescents, most did have some knowledge of STIs (Kaptanoğlu, Süer, Diktaş, & Hınçal, 2013). However, nearly 10% reported having no knowledge. When the data were disaggregated by gender, girls emerged as less knowledgeable than boys with over 13% of girls stating they did not know anything about STIs. In international assessments, only 34% of youth have an accurate understanding of how to prevent HIV and how it spreads (United Nations Education, Scientific, and Cultural Organization, 2015). For a large proportion

(about 43%), school was their source of information; in contrast, only 8% of youth reported learning about STIs from health care providers. The Turkish students agreed on the need for sexual education and indicated that secondary school was their preferred time for such learning to occur (Kaptanoğlu et al., 2013).

Many international organizations acknowledge the need for quality and widespread comprehensive sexuality education (CSE) and recognize it as a human right. Furthermore, available evidence for its effectiveness with respect to adolescent health is strong (United Nations Education, Scientific, and Cultural Organization 2015). CSE should not be confused with abstinence-only programs, which are not considered effective (Haberland & Rogow, 2014). In addition to work of international organizations like UNESCO, UNICEF, and WHO to enhance CSE around the world, young people themselves are also seeking access to sex education (United Nations Education, Scientific, and Cultural Organization, 2015) thanks in part to advocacy groups like "Where are my rights?"

Among wealthier nations, the U.S. has a higher occurrence of adolescent pregnancy than many European countries (Advocates for Youth, 2009). Experts suggest that the difference in pregnancy rates between the U.S. and other minority world countries is likely due to varying approaches to sex education and to less frequent use of contraceptives by U.S. adolescents compared to their European peers (Advocates for Youth, 2009).

The Yo Quiero, Yo Puedo (I want to, I can) program in Mexico addresses issues related to all aspects of adolescent health—sexual/reproductive, physical, and mental health. Their initiative, Planeado tu Vida (Planning your Life), is related to sexual and physical health and the program has been systematically evaluated for its effectiveness (Givaudan, Leenen, Van de Vivjer, Poortinga, & Pick, 2008; Givaudan, Van de Vivjer, Poortinga, Leenen, & Pick, 2007). Results revealed that the program was more effective in changing adolescents' attitudes and increasing their knowledge than changing behaviors. Specifically, adolescents in the program reported more knowledge of HIV/AIDS and changed attitudes about condoms compared to a control group.

## Sexual Orientation and Sexual Minority Youth

Research on sexual minority youth, those who do not identify as heterosexual, has largely been conducted in the minority world (i.e., in WEIRD countries; Saewyc, 2011). In the U.S., a report released in 2016 by the Centers for Disease Control and Prevention revealed that sexual minorities are more likely than their heterosexual peers to be victims of violence, engage in premarital sex (and thus, are more likely to contract a STI and/or become pregnant), and use alcohol, tobacco, and illicit drugs (Kann et al., 2016). Other studies showed sexual minority adolescents in Europe, Guam, and New Zealand were at a greater risk for suicide attempts (Fleming, Merry, Robinson, Denny, & Watson, 2007; Pinhey & Millman, 2004; van

Heeringen & Hincke, 2000; Wichstrom & Henga, 2003). Of course, it is important to remember that most sexual minority adolescents, at least in the U.S., lead healthy lives; their sexual minority status makes it more likely that they will engage in those risk behaviors, but most do not (Kann et al., 2016).

With respect to protective factors, it appears that a supportive family and feeling safe and connected at school are beneficial for adolescents, regardless of their sexual orientation (Bregman, Malik, Page, Makynen, & Lindahl, 2013; Saewyc, 2011). Other factors like participating in organizations for sexual minority youth and attending a school that is supportive of gay rights are specific to this group and may mitigate risk factors, at least for U.S. adolescents (Saewyc, 2011). Exploring culture-specific protective factors is an important area for future research.

## **Cognitive Development and Education**

Cognitive development, an increasing capacity for complex thinking, during adolescence may be universal, but the style of cognitive development, its application to specific situations, and its extent clearly vary by culture. The primary theory that has framed research on adolescent cognition is the cognitive developmental theory of Piaget (1972). According to Piaget, during early adolescence, youth develop the ability to engage in formal operational thinking, allowing more abstract, complex, and metacognitive thoughts. This theory, however, has been challenged because success on Piagetian tasks may depend on access to formal education, many people around the world never develop formal operational thinking, and the ability to use formal operational thinking may be task-dependent (Kuhn, Ho, & Adams, 1979; Scribner & Cole, 1973).

Other cognitive developmental theories emphasize social influences on learning and thinking and thus more directly address culture and cultural differences. Vygotsky's sociocultural theory (Vygotsky, 1986) stresses that language and thinking originate in social interactions and Rogoff (2003) describes learning by guided participation or learning by observing and pitching in (LOPI, Rogoff, Najafi, & Mejia-Arauz, 2014). What those theories have in common is that culture and learning are interwoven. Cultural differences in learning and thinking have clear implications for adolescents' lives, including their future orientation (Seginer, 2003), academic achievement (Chiu, Chow, & McBride-Chang, 2007), and moral judgments (Eisenberg, Zhou, & Koller, 2001).

Quality education is the highest priority for youth around the world; when young people were queried about their goals for sustainable development, youth in both the minority and majority world overwhelmingly prioritized a good education (MyWorld Analytics, 2013). However, many adolescents around the world are not in school. Sixty-three million young adolescents (aged 12–15) are out of school (UNESCO Institute for Statistics and UNICEF, 2015). Prominent reasons for

adolescents' exclusion from formal education include regional violent conflicts, gender role demands, their family's need for their labor or income, and lack of accessible and appropriate schools (UNESCO Institute for Statistics and UNICEF, 2015).

The schools that adolescents attend may differ in quality, in educational goals, and in congruence with local norms or traditions. For example, most schools in Cameroon implement curricula and teaching methods derived from the colonial past, techniques that are not consistent with traditional teaching styles in the family (Tchombe & Lo-oh, 2012). In Zambia, Serpell (1993) found that parents' resistance to sending their children to school was based on a mismatch between parents' goals to teach their children social responsibility, and how they perceived schooling—as fostering cognitive skills, while neglecting the teaching of social maturity.

Historically and cross-culturally, the purpose of schooling has varied (Stemler, n.d.). Some reoccurring goals include the development of academic skills, job preparation, social purposes such as development of civic responsibility, and the assimilation of immigrants. School mission statements can provide insight into the educational goals promoted (Stemler, Bebell, & Sonnabend, 2011). For example, Japanese schools focused on "morality, patriotism, the valuing of labor, respect for nature, the environment and life" whereas New Zealand schools emphasized "goal setting and performance monitoring" as well as individuality and diversity (Chapple, 2015, p. 139). In Singapore, schools catering to low-income students aimed to "equip" them for the future, whereas schools comprised of higherincome students sought to "develop" their potential (Tay & Gibbons, 1998). Even when the stated mission and curriculum correspond, cultural values affect the daily practices. In Japanese middle schools, students were left alone during short meetings of teachers and staff, a practice expressly prohibited in comparable U.S. schools (Letendre, 2000). Whereas Japanese teachers routinely greeted students as they arrived in order to mark the transition to school, U.S. teachers saw their early morning encounters as monitoring students and preventing disruptive behavior. Those differences stemmed from contrasting cultural views on what adolescents need to promote their responsible behavior (Letendre, 2000). Students in different countries may experience their time spent at school in disparate ways. When teenagers were asked to depict their thoughts during school on an outline of the brain, Singaporean adolescents used 40% of the area to represent academics, whereas US adolescents used less than 20%. A 16-year-old boy in Singapore reported thinking mostly about the syllabus and preparation for exams, whereas a 13-year-old boy from the U.S. reported thoughts about girls and lunch (Stiles & Gibbons, 2001). A vivid illustration of how schools and students differ in their educational goals can be seen in the film 2 Million Minutes (Compton & Heeter, 2008), in which the daily lives of high school students from the United States, China, and India are depicted. Although academic excellence was of overwhelming importance for students in China and India, being "well-rounded" with friends and extra-curricular activities was foremost for the U.S. students.

## **Socio-Emotional Development**

Social and emotional development during adolescence is vast and varied—it includes relationships with friends, family, and romantic partners. At the heart of this domain is identity development, building a sense of self in light of the influence of cultural values and traditions. Adolescents must grapple with questions like "Who am I now and who do I want to become?" and "What is my place in the world around me?" Not only do adolescents have a more nuanced, abstract sense of self than children, but their social worlds are also more complex (Harter, 2012). Certainly, with whom young people choose to spend their time shapes their values. Likewise, their values influence with whom they spend their time.

## **Identity Development**

Identity development, the process of constructing a stable sense of self, is the central task of adolescence (Erikson, 1968). Our beliefs and behaviors are shaped by how we see ourselves in the midst of our social relationships and cultural values. Developmental patterns reveal that advances in adolescent cognition allow their "self-portraits" to become more abstract and less concrete (Harter, 1990).

In the age of globalization, youth experience identity development differently than their peers in earlier decades—namely, because most adolescents today grow up experiencing more than one culture (Jensen & Arnett, 2012). And in some societies, the process of identity development may spill over into emerging adulthood, a period from the late teens to the mid-twenties that is sometimes called an extended adolescence. In the majority world, though, it seems emerging adulthood may be a privilege reserved only for the wealthy (Galambos & Martínez, 2007).

Often the values promoted by one culture differ from and potentially conflict with those of another. The majority of the world's youth, then, must incorporate the values and traditions of multiple cultures into their sense of self, forming a multicultural, hybrid identity reflecting elements of their parents' and families' traditional culture with the values of Western media (Jensen, 2003). In India, youth described this process as an "identity remix"; in the words of a 15-year-old Indian boy, "You take an old song, and you add some new beats on it, and you get a nice 'remix'" (Rao et al., 2013, p. 16). For Indian youth, the changes adolescents experience range from those in their micro-systems like food, dress, and relationships, to macro-level shifts relating to their culture's views on science and religion, "As we try to move away from orthodoxy, everyone thinks that we are taking in Western influences [and losing our traditional values]. Instead, I would say that what is causing changes in India is the influence of science" (Rao et al., 2013, p. 15). Enthusiasm for name-brand material goods is another way that we can see the

effect of globalization on adolescents' identity and values (Gibbons & Stiles, 2004; Gil, Kwon, Good, & Johnson, 2012; Rao et al., 2013).

A study with Guatemalan youth compared adolescents' characterizations of the ideal person in 2014 to those of their peers from 25 years earlier, providing another example of hybrid, remixed identity (Flores, Gibbons, & Poelker, 2016). Participants in 2014 thought it was important that the ideal person be fun and sexy, yet the importance of being kind and honest and liking children remained central. Thus, despite evidence for the concept of the "global adolescent" (Arnett, 2002), adolescents also integrate the traditional values of their parents and grandparents, creating their own "identity remixes" (Rao et al., 2013).

#### Social Media

Simply put, the ubiquity of social media is undeniable—on smartphones, on computers, and on tablets—present in nearly every facet of popular culture. With 2.8 billion users of all ages worldwide, social media platforms are particularly beloved by adolescents (Allen, Ryan, Gray, McInerney, & Waters, 2014; Hutchinson, 2017). In the U.S., 92% of adolescents reported accessing the internet daily (Pew Research Center, 2015).

For youth, social media serve multiple purposes—fostering feelings of social connectedness, contributing to a sense of belonging, and informing identity development (Allen et al., 2014). For Italian youth, social media use also promoted civic engagement and civic competency (Lenzi et al., 2015). For Palestinian adolescents living in Israel, the use of social media to stay connected correlated positively with collectivistic values (Abbas & Mesch, 2015). Maintaining contact was Tanzanian adolescents' favorite function of the Internet (65%); other uses were reading the news (22%), watching videos (15%), helping with homework (17%), and playing games (10%; Pfeiffer, Kleeb, Mbelwa, & Ahorlu, 2014). Tanzanian youth were most likely to access the Internet using a mobile phone and Facebook was their most visited site.

The values of Western culture (Ferguson & Bornstein, 2015) as well as health information can be propagated through social media (Pfeiffer et al., 2014). Jamaican youth who consumed more U.S. media reported values more similar to European American youth compared to their peers with less exposure to Western media outlets (Ferguson & Bornstein, 2015). Thus, media consumption facilitates what Ferguson and Bornstein (2015) call remote acculturation.

Despite its benefits, social media use does bring some challenges for teens. Research with Indian youth revealed the conflict that can arise between parents and their adolescent children surrounding social media use (Rao et al., 2013; Shah, Chauhan, Gupta, & Sen, 2016). There may also be risks to mental health and wellbeing with engagement in Facebook and other social media sites. For Scottish adolescents, the time and emotional investment in social media were associated

with poorer sleep quality and higher levels of anxiety and depression (Woods & Scott, 2015). Accessing social media sites at night appeared to be particularly problematic. Along with the greater emotional investment, nighttime use was negatively related to adolescents' self-esteem. However, a study with older adolescents in the U.S. did not provide evidence for the association between social media use and depression (Jelenchick, Eickhoff, & Moreno, 2013). For U.S. college students, Facebook use only predicted depression when it also induced envy (i.e., envy mediated the relation between Facebook use and depression), suggesting that "Facebook envy" may be more accurate a term than "Facebook depression" (Tandoc, Ferrucci, & Duffy, 2015). Those conflicting results suggest that developmental trends merit further exploration.

#### Peers and Friends

Identity development sets the tone for many other aspects of psychosocial development, including adolescents' relationships with friends, family, and romantic partners. In the West, we often associate adolescence with spending more time with friends and less time at home under the watchful eye of parents (Dijkstra & Veenstra, 2011). Peers, not parents, become the primary socialization agents for adolescents in many cultural contexts (Smetana, Robinson, & Rote, 2014). For example, peers emerge as important ambassadors for popular brand-named goods and fashion trends (Chan, 2013). In some contexts, however, this pattern of increased time spent with peers and friends (and consequently less time spent with parents) does not emerge so clearly (Saraswathi & Oke, 2013).

For many adolescents, a central challenge of this developmental period is balancing a need to fit in and feel like they belong with a desire to be unique and their own person. Friends and peers are often critical in helping adolescents to strike this balance. In a recent longitudinal study with U.S. mid-adolescents, participants with stronger close friendships at age 15 reported lower levels of anxiety and depression at age 25 along with higher levels of self-worth (Narr, Allen, Tann, & Loeb, 2017). When Guatemalan adolescents were asked to reflect on the reasons they felt grateful, many cited friends and compañeros de clase (classmates) as a central reason for their gratitude (Poelker, Gibbons, Maxwell, & Elizondo Quintanilla, 2017). The social support that the adolescents received from their friends and peers was often focused on everyday ways of helping like explaining a confusing academic concept or offering advice during a dispute with a parent. Adolescents may also use their friends as a support and barometer for more significant issues. For example, for Indonesian Muslim adolescents, participants' own religiosity was related to their friends' religiosity levels both at a baseline assessment and a year later (French, Purwono, & Triwahyuni, 2011). If adolescents' sense of religiosity had changed during that year, it mirrored similar shifts in their friends' religiosity levels.

Peer victimization and bullying are the focus of many recent studies on adolescents' relationships with peers. In a study on peer victimization and relational and physical aggression in early adolescence from four cultures—Brazil, Canada, China, and Colombia, Brazilian youth were the most likely and Colombian youth the least likely to report peer victimization (Bass et al., 2016). Cyberbullying brings another avenue for peer victimization, but the extent to which cyberbullying occurs may be culturally variable. About twice as many Australian adolescents (60%) reported being cyberbullied than their South Korean peers (30%; Lee, Park, & Kim, 2017). South Korean adolescents described most of the bullies as close friends, whereas the Australian perpetrators were more often a cell phone contact or a friend on a social networking site. Thus, future research must address culture-specific challenges for adolescent peer relationships so that culturally sensitive interventions can be developed (Bass et al., 2016).

#### **Parents**

Although many view adolescence as a developmental period reserved for peer relationships at the expense of family time, this pattern does not hold in all cultures. For example, many Indian adolescents, especially those with fewer economic resources, prefer to spend their free time with their family instead of with friends (Saraswathi & Oke, 2013).

Attempts to balance peer culture with parents' values may result in different outcomes for youth in different societies. Russian adolescents facing conflicting expectations of parents and peers were more likely to conform to their parents' wishes than youth in Estonia or Germany (Tamm, Kasearu, Tulviste, Trommsdorff, & Saralieva, 2017). When asked to explain their choice, Russian adolescents were more likely to report a desire to stay on good terms with their parents, while Estonian and German adolescents' decisions were motivated by a desire for autonomy. Adolescents from the same three countries were asked if they would prefer spending the day out with friends or staying at home to help parents. In line with the previous pattern, most Russian adolescents preferred to stay home to help around the house while most German youth wanted to spend the time with friends; for Estonian adolescents, no clear pattern emerged.

One of the central myths of adolescence is that adolescent-parent conflict is inevitable. First, we want to clarify that the storm and stress model of adolescence promoted by G. Stanley Hall, Anna Freud, and others is more myth than truth and is certainly not culturally universal (Arnett, 1999). So, although parental conflict is more common during adolescence than in other developmental periods, many adolescents remain close to their parents and conflict is less common in traditional cultures than in industrialized ones (Arnett, 1999). Margaret Mead's (1928) work also supports the idea that turmoil and constant conflict do not *have* to ensue during adolescence.

Second, despite the fact that storm and stress do not always occur, for parents of adolescents who are in the midst of creating a "remixed identity," unique challenges may arise (Kapadia, 2017). For middle-class urban adolescents in India, parents were traditionally viewed as guardians and disciplinarians, a view that is in conflict with adolescents' idea of the modern-day parent as a friend (Kapadia, 2017). This shift in how urban Indian adolescents see the role of their parents has likely been shaped by globalization and has also been reported for South Korean fathers who were traditionally viewed as strict and distant (Hyun, Nakazawa, Shwalb, & Shwalb, 2016).

Adolescents left behind by migrant parents are a special case, given that their daily lives are not so intimately intertwined as children of non-migrant parents. Furthermore, this challenge of growing up with one or both parents working abroad is largely limited to youth growing up in the majority world. Interestingly, the extant literature on migrant families is focused almost exclusively on the migrant workers themselves or on the reunification process (Lykes & Sibley, 2013). Guatemalan youth whose lives have been affected by migration experience a host of negative consequences related to their behavior, academic performance, and their relationships, including those with their parents (Lykes & Sibley, 2013). The severity of those consequences may depend on which parent (mother or father or both) migrates (Mazzucato et al., 2015). Nigerian youth experienced poorer outcomes when mothers migrated compared to fathers, while, in Angola, outcomes were poorer when both parents migrated (Mazzucato et al., 2015). Those patterns did not hold in Ghana.

Many parents working away from their families send remittances home to help defray educational and other costs, but the effect of that money depends on several factors, including the quality of care as well as adolescents' gender and age (UNICEF, n.d.). For most youth, remittances are used to boost family income, although for many adolescents and their caregivers, poverty lingers (Castañeda & Buck, 2011). Some adolescents view their parents' sacrifice to leave their family behind and work abroad as a debt that must be repaid (Artico, 2003), while others develop a sense of dependence on and entitlement to those remittances (Schmalzbauer, 2008). While Honduran adolescents reported that weekly phone calls allowed them to stay connected with their parents (Schmalzbauer, 2008), their peers in Ecuador felt that their parents were unable to support them emotionally while away (Jerves, De Haene, Enzlin, & Rober, 2016). Laura, a 15-year-old girl from Ecuador shared, "I don't feel that they support me, they just send money and clothing" (Jerves et al., 2016, p. 14). Guillermo, a Honduran adolescent, supported the notion that the benefits of having a parent working abroad are economic in nature.

If she was here maybe she could help in different ways, however for me it is important that she is there since I get money to pay for school ... So, in the first place the benefit of my mom being in the US is economic. (Schmalzbauer, 2008, p. 336)

## Romantic Relationships

Romantic partners comprise a third group of close others who play a central role in adolescents' lives (Nauck & Steinbach, 2012). Perhaps the most notable way that globalization has influenced adolescents' romantic relationships is the shift in views on arranged marriage. For example, Armenian and Indian youth who endorsed more modern compared to traditional views were also less likely to endorse arranged marriage (Huntsinger, 2013; Rao et al., 2013).

Like relationships with friends and parents, though, romantic relationships are informed by adolescents' cultural context. In a cross-cultural study with Canadian and Chinese youth, Canadian adolescents were more likely to be romantically involved than Chinese adolescents and more frequently reported past romantic relationships (Li, Connolly, Jiang, Pepler, & Craig, 2010). Chinese girls, in particular, had few romantic experiences. Chinese youth reported being closer to their parents than Canadian youth, which may explain why Chinese youth reported fewer romantic relationships.

Adolescents' religious affiliation may also shape romantic experiences, especially with respect to sexual involvement in those relationships. In a study with native and immigrant participants living in Germany and Israel, Christian adolescents were more likely to engage in sexual relations with their partners than their Muslim or Jewish peers (Nauck & Steinbach, 2012). An interaction effect with gender revealed that, compared to Christian peers, infrequent sexual relations were true for Muslim girls but not for Muslim boys and for Jewish boys but not for Jewish girls. Participants' home country and country of residence were less strongly related to sexual encounters in romantic relationships.

Parents' involvement may also relate to how adolescents experience romantic relationships. Mexican adolescents who reported higher levels of maternal warmth and *respeto* had longer romantic relationships (Espinosa-Hernández, Bissell-Havran, Van Duzor, & Halgunseth, 2017). In Latin American families, *respeto* signifies respect for parents and family. Those who perceived greater maternal monitoring reported shorter romantic relationships, although this main effect was superseded by an interaction with age. Older adolescents who perceived high levels of maternal monitoring were more likely to have shorter relationships.

#### Mental Health

As many as 20% of the world's children and adolescents face mental health challenges each year; many battle depression and/or anxiety (World Health Organization [WHO], 2012, 2018b). Thus, it is no surprise that worldwide, neuropsychiatric disorders are the primary reason for disability among adolescents (WHO, 2018b). Despite the need for services worldwide to address this issue,

resources are limited, especially in low-income and middle-income countries (LMIC) and in places where the need may be the highest (Kieling et al., 2011; McLoughlin, Gould, & Malone, 2015). This quote captures that concern well: "Adolescent health is everybody's business and nobody's responsibility" (WHO, 2012, p. 20). Fifty percent of all mental illnesses are present by age 14; this number jumps to 75% by the mid-twenties (WHO, 2018b). Age-specific factors that put adolescents at risk for mental illness include: trouble with family and friends, difficulties at school, substance use, risk taking, and early sexual activities (Kieling et al., 2011).

According to World Health Organization (WHO, 2018a), suicide is the third leading cause of death in adolescents around the world. Although adolescent suicide rates are no longer increasing in much of the minority world, missing data and the inconsistency of reporting suicides in much of the majority world suggest we have an incomplete picture of suicide trends (McLoughlin et al., 2015). Adolescents from 17 European countries reported a median lifetime suicide attempt rate of 10.5%; rates were highest in Hungary (23.5%) and lowest in Armenia (4.1%; Kokkevi, Rotsika, Arapaki, & Richardson, 2012). Youth with an indigenous ethnic identity are at a heightened risk (McLoughlin et al., 2015).

Researchers have begun to evaluate the effectiveness of programs designed to educate adolescents about mental illness. In LMICs, interventions to promote good mental health may be successfully implemented in schools, especially if long-term and structured (Fazel, Patel, Thomas, & Tol, 2013). However, the effectiveness of those programs in treating youth with existing mental health concerns is not so apparent (Araya et al., 2013; Fazel et al., 2013). In a Canadian high school, students' attitudes and knowledge about mental health improved after adolescents completed a program designed to increase mental health literacy (McLuckie, Kutcher, Wei, & Weaver, 2014). Those gains were maintained at a 2-month follow-up assessment.

In addition to high rates of anxiety and depression, adolescents are also an at-risk group for eating disorders. Although eating disorders were once largely limited to wealthy women and youth in the minority world due to the thin ideal promoted there, the spread of Western media through globalization has also brought an international increase in disordered eating (Pike, Hoek, & Dunne, 2014). Thus, to describe eating disorders as culture-bound syndromes is not an accurate description, given their growing and widespread prevalence across societies (Markey Hood, Vander Wal, & Gibbons, 2009). Research with Guatemalan early adolescent girls, for example, suggested that those youth face the same concerns with body fat and shared the same thin ideal as their minority world peers; Guatemalan adolescents' internalization of media's standards was particularly detrimental for body image (Vander Wal, Gibbons, & Grazioso, 2008). For Fijian adolescents, peer influence was more strongly related to disordered eating than exposure to minority world media (Gerbasi et al., 2014). A study with Japanese adolescent boys and girls revealed rates of disordered eating were lower than in

Western countries (Nakai, Noma, Nin, Teramukai, & Wonderlich, 2015). Perhaps this is due to the excellent health care that high school students receive in Japan, which could serve as a model for other countries.

## Adolescents Experiencing Vulnerable or Difficult Circumstances

Many adolescents throughout the world live in challenging circumstances. A root cause of those difficulties is poverty; approximately 238 million youth live in extreme poverty (Advocates for Youth, 2008) and 42% of the world's youth live on less than \$2 per day (Global Statistics on Youth Poverty and Unemployment, n.d.).

Poverty leaves young people particularly vulnerable because it precipitates or exacerbates the risks of leaving school, social exclusion, exploitative or dangerous labor, recruitment as child soldiers, or sexual or physical abuse. Thirteen-year-old Abdul Aziz works in unsafe conditions in a rustic gold processing facility in Ghana (World Bank Group and UNICEF, 2016). Paolo, an indigenous 17-year-old from Costa Rica was "forced to leave school because of the effects of the economic crisis on his community and family" (UNICEF, 2011, p. 11). Robbie, a 19-year-old, has lived on the streets of Toronto for 3 years. He copes, occasionally receiving care packages from kind strangers and taming rats (Spurr, 2015).

When natural disasters or conflicts strike, adolescents living in poverty are more likely than their economically secure counterparts to experience dire consequences (United Nations Development Program [UNDP], 2004). Previously existing resources may be diverted to address the disaster or conflict, leaving those who are poor particularly vulnerable. Risk factors such as poverty, gender, and lack of access to health care interact; for example, during war and after natural disasters, adolescent girls are at enhanced risk for gender-based violence, unplanned early pregnancy, and death during childbirth (United Nations Population Fund [UNFPA], 2016). After surviving the 2015 earthquake in Nepal, Srijana, 16, gave birth to her daughter in a refugee camp (UNFPA, 2016).

Despite difficult circumstances, many adolescents and youth thrive. Research has demonstrated resilience, including post-traumatic growth, in adolescents experiencing difficult circumstances. For example, unaccompanied migrant youth have often experienced severe losses, such as death of parents, witnessing atrocities, and malnutrition. Yet, as exemplified by some of the Sudanese "Lost Boys," they can show amazing resilience, using personal qualities such as good temperament, coping skills, and spirituality to make enormous gains in a short period (Carlson, Cacciatore, & Klimek, 2012). They are also helped by supportive fictive family members and connection to community organizations. Likewise, former child soldiers were more likely to show posttraumatic

resilience if they felt more spiritual support, less guilt, and were less motivated to seek revenge (Klasen et al., 2010). One former Ugandan child soldier, a 16-year-old boy, said, "I will be a person who is responsible in the community; I will be an honest person; I will be a person who helps people" (Klasen et al., 2010, p. 1096).

#### Conclusion

Adolescence, a time of transition and considerable biological, cognitive, and socio-emotional advances, is culturally bound. With that said, the world's adolescents share a considerable number of milestones. In the biological domain, all adolescents experience puberty. The age at which puberty occurs and the reaction it elicits from the family and community certainly vary by culture, but youth from Canada to Chile to Spain to Indonesia all experience this biological transition. In addition to their physical development, adolescents also advance in the complexity of their thinking—their ability to contemplate their futures, create goals, and engage in hypothetical thinking influences everything from the way they approach problems to how they construct their futures. Such sophisticated thinking is another critical stepping stone that facilitates adolescents' transition to the world of adulthood. And in the socio-emotional domain, adolescents are busy creating identities and determining who they want to become.

Adolescents also display extraordinary resilience and resourcefulness in crafting their futures and overcoming obstacles. Christine, a 14-year-old girl living in Portau-Prince, Haiti, just after the tragic earthquake in 2010, was determined to continue her education (UNICEF, 2010). Armed with the wisdom of her role model, Socrates, and her notebook of anatomy drawings, Christine traveled from her home in a displaced persons camp to her school each day in her quest to become a physician. Of her three siblings, she was the only one who still went to school—a consequence of her family's limited economic resources.

Christine has recognized the privileged student status she holds in her family and returned from school every night to teach her 9-year-old sister the day's lessons. In Christine's words, "I feel very sad to go to school when my little sister doesn't. I try to teach her what I've learned every evening when I come home from school" (UNICEF, 2010, para. 10). Christine's story shares some parallels with that of Rashida, a married adolescent girl from Bangladesh (UNFPA, 2003). Rashida shared, "If I had [had] the information beforehand my marriage would have been delayed for at least two years and I could have continued my schooling. Now I am sure that the same would not happen to my sister" (UNFPA, 2003, p. 5). Both girls recognized education as the foundation for a brighter future and both shared concern for younger sisters in hope that would they have every opportunity for success. To provide such opportunities for all adolescents, we must allocate more resources for the world's young people, as they are deserving of our respect and attention that will allow them to flourish.

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# Cultural Variations in Perceptions of Aging

James T. Gire

The past few decades have witnessed a tremendous increase in the population of the elderly, and estimates indicate that the rising elder population in the next several decades will be even more dramatic. The estimated population of the elderly, defined as those who are 60 years of age and older, was 962 million in 2017. That number is expected to more than double by 2050 to 2.1 billion, and more than triple in 2100 to 3.1 billion. Across the globe, this segment of the population (60 or over) is growing faster than all younger age groups. The increase in the absolute and relative number of the elderly will be much steeper in the developing world. Within that age range, 65% of the global increase between 2017 and 2050 will take place in Asia, 14% in Africa, and 11% in Latin America and the Caribbean; the remaining 10% will occur elsewhere, mostly in the developed world (United Nations Population Division, 2017 Revision). Thus, unlike the patterns observed in the middle of the twentieth century and earlier, when aging was a developed world phenomenon, the anticipated shift in demographic patterns will also encompass the developing world. It is obvious that this rapid increase in the elderly population will have a tremendous impact on all aspects of society. An area of obvious influence is the effect that population aging will have on the support ratio, usually defined as the number of workers per retiree, operationalized as the number of people aged 20-64 years divided by the number of people who are 65 years and over. Therefore, it is imperative to gain a better understanding of the aging experience in order to ensure and enhance the well-being of the elderly and foster a greater understanding across demographic categories.

One area that has received research interest is the way in which the elderly are perceived. These perceptions—images, stereotypes, and attitudes about the old and about growing older—are important because they influence the way in which

the elderly are treated, and often influence the way in which the elderly view themselves (e.g., Butler, 1980). Research has also indicated that both positive and negative perceptions of aging are associated with mental, affective, and cognitive well-being of individuals approaching the transition from middle adulthood into late adulthood. In some instances, there is a relation between positive self-perceptions of aging and longevity (e.g., Levy & Langer, 1994; Levy, Slade, Kunkel, & Kasl, 2002; Meisner, 2012).

However, culture, rather than an individual's personal experiences of aging, appears to have a greater influence on perceptions of aging. A good deal of past research has found important differences across cultures in their beliefs about old age and attitudes toward the elderly (e.g., Brewer, Dull, & Lui, 1981; Levy, 1999; Levy & Langer, 1994; Schmidt & Boland, 1986). The fact that these perceptions are not usually biologically determined means they can vary, and indeed have varied, even within the same cultures over time. Thus, the source and flavor of our perceptions are determined by the prevailing beliefs and conditions in a given society over time. Because of intercultural communication, it is not surprising that there are also cultural similarities in perceptions of aging. The advent of globalization, greatly enhanced by advances in information and communication technology, is expected to result in even greater similarities, particularly among the educated class, across cultures. Regardless of the origins of perceptions of the elderly, they influence the views people across the age strata hold about their current and future selves with respect to physical declines, social roles, anxiety about aging, living arrangements, and intergenerational relations. I will examine these issues in turn.

# **Physical Declines**

The most obvious image that comes to mind when most people talk about aging appears to be the physical declines that accompany longevity. However, it has become increasingly obvious to researchers that not everyone grows old in the same way. In fact, throughout history, societies have differed markedly in the meaning they have given to the same features of aging; these differences have also occurred in the same society across different times. A range of characterizations of aging includes positive, negative, ambivalent, and sometimes even contradictory images. These attitudes and perceptions have tended to mirror the successes, problems, and challenges of aging arising from the social, political, cultural, and economic variables prevalent in a given society at the time. Before we proceed, we need to make a distinction between primary, secondary, and tertiary aging. *Primary aging* refers to the irreversible (disease-free) changes in the biological, psychological, or sociocultural processes that arise as a normal course of development. Poor health is not an inevitable outcome of aging; thus, *secondary aging* involves changes that are related to diseases (e.g., Alzheimer's and arthritis),

lifestyle (e.g., smoking or diet), or environmental events (e.g., pollution or climate) that are not universally shared. Many of these health problems can be prevented, delayed, or managed. *Tertiary aging* refers to the rather sudden and speedy declines that at times precede death. A person, usually from the late 80s, who hitherto showed remarkable cognitive abilities, suddenly loses them swiftly in the years or months before death (Birren & Cunningham, 1985).

Some writers had presumed that negative views of aging were a recent phenomenon, a byproduct of major changes in economic development, aided by developments such as industrialization, which reshaped the balance of power between young adults and the elderly. However, the oldest reported work on depictions of the elderly, by philosopher poet Ptah-hotep in Egypt in 2500 BCE (cited in de Beauvoir, 1972), painted a rather bleak picture of aging:

How hard and painful are the last days of an aged man! He grows weaker every day; his eyes become dim, his ears deaf; his strength fades; his heart knows peace no longer; his mouth falls silent and he speaks no word. The power of his mind lessens and today he cannot remember what yesterday was like. All his bones hurt. Those things which not long ago were done with pleasure are painful now; and taste vanishes. Old age is the worst of misfortunes that can afflict a man. His nose is blocked, and he can smell nothing any more. (p. 92)

This very negative portrayal of the elderly was a largely Western conception, however. Ancient Asia had very positive images of aging, influenced by Confucian principles that extolled the virtues of old age. In describing moral development, Confucius suggested that great wisdom was to be found only in the latter stages of life: "At fifteen, I applied myself to wisdom; at thirty, I grew stronger at it; at forty I no longer had doubts; at sixty there was nothing on earth that could shake me; at seventy I could follow the dictates of my heart without disobeying the moral law" (quoted in Achenbaum, 2005, p. 21). The preeminence of age over other factors in Chinese society at the time ensured that older women had more authority than their sons and daughters (Thang, 2000).

Yet even in early Western civilization, images of the elderly were not always negative. In ancient Greece, Sparta was said to be ruled by a *gerousia*, which was a council of men who were at least 60 years of age, at the beginning of the seventh century BCE. This "council of elders" was selected on the basis of their wisdom, and they were expected to exercise their authority prudently. A similar view of aging was advanced by Cicero (106–43 BCE) who argued that what the elderly gained in wisdom based on years of experience, and characterized by reflection, force of character, and judgment, more than made up for the physical declines in muscle, speed, or physical dexterity (Achenbaum, 2005).

What is evident from these accounts is that perceptions of the elderly, and attitudes toward aging, derived from the physical characteristics of the aged, were usually correlated with chronological age, and have routinely associated old age

with decline. The portrayed physical declines notwithstanding, perceptions of the aged have not been uniform across time, as indicated earlier. Negative views of aging and the elderly have been interspersed with positive images at other times in literally all societies. These changing perceptions may be due to several factors, but we will dwell on two such factors in this section: demographic patterns and economic transformation.

## Demographic Patterns

Historically, old people have constituted a very small segment of society, seldom surpassing 2% of the population at any given time (Hauser, 1976). In fact, infant mortality rates were very high even at the beginning of the twentieth century. In India, for example, Robinson (1989) reported that only one in three babies in Bombay survived to celebrate their first birthday. Considering that the definition of old age as beginning around 65 years of age, plus or minus 15 years, has not changed at least in Europe and North America since 1700 (Harris, 1988), there were very few elderly in society. The rarity of attaining old age meant that the old were, at times, revered simply for having lived as long as they had. These small numbers made the elderly appear almost as strangers in the land of the young, a view that was unlikely to result in very positive images. If prejudice is presumed to derive, at least in part, from unfamiliarity with the targeted group, perceptions of the old as unfamiliar, unusual, and even worthy of suspicion and contempt, are not surprising. This dearth in numbers also meant that the aged had very limited support networks of their peers. Because most members of their generation had been lost to death, the elderly increasingly found themselves concerned with issues of very little interest to the young. Rather than living in the present or making plans for the future, they appeared to be preoccupied with the past. This, coupled with absence of social support of their age cohort, meant that the elderly were being cared for by the young. This resulted in relatively negative perceptions of old age, even by the elderly themselves, as lonely and dependent.

If this argument about demographic patterns holds, then it might explain the current upswing in attitudes toward the elderly in the West. This implies that perceptions of the elderly should witness a more positive outlook as the proportion of the elderly in the population increases. The example of Chile is suggestive of the changing demographic patterns that could influence future perceptions of the elderly. Of the cohort born in 1909, only 63% reached the age of 5 years, and only 13% were projected to live more than 85 years. In contrast, a mere 2% of the 1999 cohort had died before age 5 and at least 50% were projected to celebrate their 85 birthday (World Health Organization, 1999). It is difficult to imagine that this expected dramatic change in demographic patterns would not affect perceptions of aging. In democratic societies, this influence

may also be driven by political considerations as the elderly constitute a viable voting bloc that can influence election outcomes and policies.

However, there appears to be a tipping point beyond which the growth in the elder population begins to constitute a problem and may actually yield negative attitudes toward aging. In a survey of global public opinion on aging in 21 countries, the Pew Research Center (2014) found that respondents viewed aging to be a major problem in countries with the highest percentage of the elderly. Five of those countries had at least 50% of the population indicating that aging was a major problem—Japan, 87% South Korea 79%, China 67%, Germany 55%, and Spain, 52%. Thus, there is heightened public anxiety over aging in countries whose projected aging populations are among the highest by 2050. In Japan, South Korea, Germany, and Spain, an estimated 33% or more of the population is expected to be 65 years and older by 2050. That same segment of the population in China is projected to triple from 8.3% in 2010 to 23.9% in 2050. By contrast, Egypt, Indonesia, and Nigeria, where the projected population is relatively young by 2050, expressed the least anxiety about aging being a problem, with 23%, 25%, and 28% respectively (Pew Research Center, 2014). In the same survey, people were more likely to indicate that the greatest responsibility for the economic well-being of the elderly should be borne by the family and the government rather than the elderly themselves.

Globally, the growth in the proportion of the elderly is poised to have serious implications on the support ratio, sometimes referred to as the dependency ratio (Cavanaugh & Blanchard-Fields, 2019), defined as the number of workers per retiree. This ratio is about to undergo a major shift as the proportion of the elderly increases (He, Goodkind, & Kowal, 2016). Operationally, support ratio refers to the number of people aged 20-64 years divided by the number aged 65 years and older. The smaller the ratio, the greater the number of workers needed to support (typically in tax revenue) social programs for the older (usually retired) people. In 2017, Africa had the highest ratio of 12.9; Asia 7.4; 7.3 for Latin America and the Caribbean; 4.6 for Oceania; 3.8 for North America; and 3.3 for Europe. Japan, at 2.1, had the lowest potential support ratio in the world (United Nations Population Division, 2017 Revision). The projection for the U.S. is a shift from its current 3.1 to 2.1 by 2030. This is likely to have a profound impact on elder perceptions. Starting as early as the 1970s when the ratio was higher and the elderly had much higher income, there began the tendency to use older adults in the U.S. as scapegoats in political debates regarding government resources. The general argument was that too much government revenue was devoted to social programs for older adults, particularly Social Security and Medicare. Much of the great healthcare debate that started in the 1990s focused on the spiraling cost of care for older adults that threatened to bankrupt the federal budget if not controlled (Binstock, 1999). The intensity has grown as the support ratio has shrunk and the federal deficit ballooned. Similar trends could be replicated in other countries as this ratio continues to change and would most likely affect elder perceptions.

#### **Economic Transformation**

Changes in the way in which the elderly are perceived in different societies, and within the same society over time, may have origins in the economic power that older people have held at different times. Achenbaum (2005) argued that during times when agricultural activities were the predominant mode of economic attainment, the elderly were in a favorable position for a number of reasons. They had the know-how of agricultural production accrued from past experience, and even though they were diminished in physical strength, they had agricultural management skills and could supervise the work of others. Furthermore, because they had control over land, they had some measure of economic security. Children worked the land for their parents or grandparents, in the hope of getting title to these lands in the future. The elders ensured that they had made adequate provisions for themselves before they transferred ownership of the land. The belief, especially in more traditional societies where elders were associated with magic powers thought to impact the viability of the land, further strengthened the position of the elderly.

The Industrial Revolution (in the late eighteenth century) suddenly changed the balance of power, and the economic status of the elderly declined significantly. Industrialization altered both the modes of production and patterns of consumption. Because machines could now perform the tasks hitherto performed manually, the elderly lost the expertise that was their strongest suit. In the new scheme of things, bureaucratic expertise, as opposed to preeminence in the family, became more valued, making it difficult for the elderly to cope with these changes and rendering older workers basically obsolete. The value of other elder characteristics such as storytelling and wisdom sharing were also significantly devalued (e.g., Nelson, 2005; Schoenberg & Lewis, 2005). Particularly at the early stages of the Industrial Revolution, the elderly were treated as if they were disabled. Retirement programs were instituted mainly to get rid of workers whose skills were not valuable and who were thus expendable (Achenbaum, 2005).

The preceding argument may provide a partial explanation for differences in elder perceptions across cultures, especially in the period following industrialization. The Industrial Revolution was principally in the West and only recently became a predominant influence in the developing world. To the extent that economic transformation was related to changing perceptions of the elderly, countries in which industrialization took hold should display more unfavorable attitudes toward aging and the elderly. Indeed, some research has indicated that Eastern societies adopted a more positive view of aging than Western cultures. Aging is associated with an increased reverence and a greater bearing in countries such as China (Cheng & Chan, 2006) and Japan (Usita & Du Bois, 2005) than in North America and other individualistic societies.

However, considering the influence of industrialization and the more recent and powerful impact of information technology, views of aging may be changing, even in non-Western cultures. Recent research has found mixed and inconsistent results, attesting to this fact. For example, some studies have reported comparable rates of elder mistreatment in several Eastern societies, such as Japan (Fackler, 2010), India (Ray, 2008), and Malaysia, where close to one third of the people 60 and older have been abandoned by their children (*Borneo Post*, 2011). This finding parallels increases in elder abuse in the West (e.g., Bell, 2013). Amhoff, Leon, and Lorge (1964) suggested that negative social attitudes toward the elderly are presumed to result in lower status and consequently, diminished roles for older people in the U.S. To the extent that this holds true, societies with more positive views of the elderly should be characterized by enhanced, or at least non-diminished, status and more positive roles for the elderly.

#### **Social Roles**

An obvious way in which attitudes about and perceptions of aging can affect the elderly is manifested in the roles assigned to older adults in society, or roles older adults are presumed or expected to play. Researchers have used a variety of ways of inferring roles for the elderly, involving the portrayal of older adults in advertising, in examining images of older adults in children's drawings, and asking different segments of the population their views of elder roles. Some researchers (e.g., Frith, Shaw, & Cheng, 2005; Srikandath, 1991) have suggested that advertisements can provide a broad revelation of what cultures value, who is deemed to be important in a culture, and how certain groups and roles are represented in differing status positions. Using this premise that advertisements represent the prevailing ethos in a particular society, Raman, Harwood, Weis, Anderson, and Miller (2008) examined portrayals of older adults, as well as other groups, across a number of magazine advertisements in the U.S. and India to see how the elderly are valued and represented in the two cultures.

The results revealed very interesting cross-cultural similarities and differences. One of the similarities was the underrepresentation of the elderly (and the young) in advertisements in general, consistent with other studies suggesting underrepresentation of the "tails" of the lifespan in media images (Harwood & Anderson, 2002). Cultural differences appeared in the kind of products with which the elderly were associated. In the U.S., the elderly were more often featured with health products, an indication of the negative stereotypes about old age and health. In India, on the other hand, older models were more extensively associated with advertisements for financial services, a finding that, in the opinion of Raman et al. (2008), was a reflection of the increasing financial uncertainty that may be related to the increasingly changing family structure in India. Another difference was in the portrayal of older adults in the U.S. with age peers while their Indian counterparts were associated with large extended families. This may be a reflection of

differences in culturally appropriate roles for the elderly in the two cultures. This has implications for intergenerational relationships and living arrangements that will be discussed in the next section. Older peers may play a significant role in the U.S. because of age-segregated living arrangements in planned retirement communities. In India, however, the family is the focus for older adults, and they tend to live with or near their oldest child (usually the son).

Cultural differences in social roles for the elderly can also be inferred from the manner in which children view their grandparents. Hummel, Rey, and d'Epinay (1995) examined drawings of grandmothers and grandfathers of 9,606 children, ages 6-14 years, in six countries: Bulgaria, (then) Czechoslovakia, Guatemala, India, The Netherlands, and Switzerland. From an analysis of the drawings, the authors were able to identify three typologies. The first reflected a depiction of grandparents living alone, and spending time in leisure and self-care, an indication that they no longer had a viable social role in society. This was reflective of Switzerland and deemed to represent findings typical of most industrialized European countries. The second typology also described grandparents as being isolated; however, they appeared to have the same roles as other adults that fit in the traditional gender-role division of labor, with grandmothers functioning mainly in the kitchen and grandfathers involved with outside work. This was represented mainly in Bulgarian drawings and associated with countries in which agriculture still plays an important role. The third typology was suggestive of grandparents as strongly integrated into society but primarily in a care-giving role. This was more or less portrayed in drawings from India and converges somewhat with the Raman et al. (2008) findings in portrayals of the elderly in advertisements mentioned earlier in this section.

Societal expectations about roles for the elderly can also be obtained by asking people in different cultures to state the functions performed by or expected of older adults. Eyetsemitan and Gire (2003) conducted a seven-country study exploring several processes about aging in the developing world. The study included Bahrain, Bangladesh, Botswana, Brazil, Chile, Indonesia, and Nigeria. These nations are in different parts of the world and represented low, medium, and high rankings on the United Nations Human Development Index (HDI). With respect to roles for the elderly, the authors found that older adults were expected to offer advice on both family and community disputes. They were also expected to preside over important social and spiritual functions, and to be wise. These are very active roles for the elderly and would be considered a good way to age, from the standpoint of *activity theory* (Maddox, 1964).

However, this expected high level of activity seems to reflect Erikson's (1959) middle adulthood stage of *generativity* versus *stagnation* more than *ego integrity* versus *despair* that he theorized to characterize the late adulthood stage. In Erikson's late adulthood stage, ego integrity versus despair involves focusing on finding meaning in life through a review of what has transpired in one's life, rather than feeling despair or bitterness. This implies a shift in attention from other to self.

The findings from Eyetsemitan and Gire's (2003) study suggest that Erikson's theory may apply to individualistic societies that may be related to the developed world dimension (Eyetsemitan, 2002) but that the shift from other to self may not be applicable to collectivist cultures that typically reflect the developing world dimension. These cultural variations in roles played by the elderly may influence the nature of intergenerational relationships and living arrangements in different cultures.

## Intergenerational Relationships and Living Arrangements

Cultural differences in intergenerational relationships and living arrangements may derive initially from different conceptions of what constitutes a family. In Western societies, the family most commonly refers to the nuclear family, consisting only of parents and their children, whereas for much of the non-Western world, families are viewed from an extended family model that tends to include grandparents and other relatives who usually reside with parents and their children. It should be noted, however, that there is a caveat to the generalities implied in this statement. Western and non-Western (usually developing) societies as used above are not homogeneous entities—there are at times great disparities in cultural, social, demographic, and family functions and forms within these categorizations.

## Intergenerational Relationships

Differences in the conception of the family underlie the variations in family relationships of older people, especially in the area of elder support, in Western and non-Western societies. The prevailing situation seems to be that the extended family takes care of the needs of older people in developing countries, whereas very limited support is given to the elderly by family members in the Western (developed) world. One of the theories commonly used to explain this developed world-developing world disparity has been modernization theory. The basic tenets of modernization theory (e.g., Burgess, 1960; Cogwill, 1972, 1974) suggest that family support for the elderly is high in traditional, pre-industrial developing societies due to traditional values of familism and filial obligation or *filial piety*, according to which people subordinate their individual interests to the demands and values of the family. Societies where these values predominate are referred to as collectivist cultures (Hofstede, 1980, 1983).

In contrast, modernization loosens the grip that the family has on the individual; due to industrialization, urbanization, and other aspects of technological development, the family ceases to be the main unit of production and the process through which people attain social mobility. Emphasis shifts from devotion to the

extended family to an emotional bond forged between spouses and their children—a focus on the nuclear family. In Hofstede's categorization, countries in which these values predominate are termed individualistic societies.

These underlying differences in conceptions of the family have a direct impact on family support for the elderly because the erosion of the extended family brings with it a loss of the traditionally powerful status that older people wield in society. They no longer possess the powers to enforce the customary obligation of children to provide normative support for the older members of the extended family; they also lack resources to give their children in return for support. Consequently, support for the elderly in modern societies derives not from binding customary obligations that were enforced by very stringent social, economic, and religious sanctions that were usually controlled by the elderly themselves; rather, it depends on the willingness of the children to undertake these tasks based on the level of sympathy or affection that they may have for their older relatives (Aboderin, 2005). Inherent in this viewpoint is the implication that family support for the elderly is a reciprocal interaction in which aged parents and relatives provide services such as advice in exchange for support from their children.

There have been many criticisms of modernization theory postulations, one of which is its implied linear, sequential mode of development with its presumed, fairly uniform characteristics in pre-industrial societies, to a pathway or transition to modernization and "development" via industrialization. It also implies that regardless of how one conceives of the terms "modern" and "developed," the pathway to modernization or development has to follow the historical processes of industrialization as attained in the West. Additionally, it seems to equate economic progress with development. However, even if one were to accept this premise with regard to disparities in intergenerational relationships, empirical support for this viewpoint in the developing world is inconclusive, at best. Some of the research has suggested that despite technological change, family ties and support of the elderly have persisted; that many older people still live with their younger relatives in households of two or more generations, and that they tend to maintain close relations with their families and depend on them as their primary means of support. There have also been findings indicating some erosion of family relationships for support of older kin following technological change. This has prompted some governments, especially in East Asia, to initiate public policies and avenues for providing elder support to replace some of the traditional roles previously played by the family (e.g., Aboderin, 2004; Hashimoto, 1993; Hermalin, 2003; Malhotra & Kabeer, 2002).

Notwithstanding the criticisms of modernization theory, changes do occur in intergenerational relationships following technological change. Some of these relate to changes in demographic transition that we already touched upon, although in a different context, earlier in the chapter. To the extent that demographic shifts significantly influence family relationships, especially with respect to care for the elderly, there is an emerging trend that requires urgent attention if

potentially far-reaching negative consequences for the elderly are to be forestalled. The urgency of demographic change in the developing world arises from the unparalleled pace at which the transition is occurring. For example, even though it took a country such as France 115 years to increase its older population from 7% to 14%, it may take most nations in the developing world just 20 years, perhaps even less, to accomplish that same feat (Randel, German, & Ewing, 1999).

Some researchers have identified the demographic changes in the developing world as the most significant contributor to changes in the structure and composition of families. Major advances in medical technology have increased longevity, contributed to steadily declining fertility rates, treatment and prevention of infectious diseases, and reduction in infant mortality rates. These developments are poised to dramatically increase the numbers and proportion of the elderly in the next few decades. For example, life expectancy at birth rose by 3.6 years between 2000-2005 and 2010-2015; that translates to 67.2-70.8 years. The growth in life expectancy occurred in all regions of the world, but the greatest gains were in Africa, where life expectancy rose by 6.6 years within the same time range. This is significant because life expectancy rose by only 2 years in the preceding decade (United Nations Population Division, 2017 Revision). These demographic shifts are likely to change family relationships in significant ways. For example, these changes will contribute to a decline in the number of younger family members available to provide support to older kin. The one-child policy in China that had been in effect since the late 1970s contributed to this problem, and is one of the major factors behind the decision by the Chinese government in 2015 to terminate that policy and allow two children per couple, effective in 2016.

Another factor credited with changes in family relationships is rural—urban migration. Adult children typically provide the majority of care for aging parents in both Western and non-Western societies, but especially in Asian cultures (Barnett, 2013; Haley, 2013; Lai, 2010). Presumably, high rates of urbanization in the West contributed to the reduction of family support for elderly kin. If the same process repeats, we could experience a similar pattern in developing nations in the coming decades. For example, according to the World Health Organization (WHO), the urban population increased from 43% in 1990 to 54% in 2015 and is estimated to rise to 60% by 2030. Even though urbanization is occurring across all regions, the growth rate is highest in Africa and Asia, where it currently stands at just below 50% (World Health Organization, 2015).

These twin trends are expected to affect family structure and support in at least two ways. In the first instance, the out-migration is age-selective, with younger family members more likely to leave rural areas for urban centers, leaving older people behind without younger family members to provide needed support. In a study of the effect of rural–urban migration on left-behind parents in China, Ao, Jiang, and Zhao (2015) found that migration of adult children to urban areas increases the likelihood of the elderly parents being in poor health by 8%, even when the child sends money for support. This highlights the importance of having

someone at home to care for the elderly. This is particularly true in instances where the adult child who migrated is an only child, the parents are low-income, and are aged 60 years and older. In such instances, the likelihood of declines in health and other measures of well-being increases to 43.7%, suggesting that having other people in the household is of tremendous importance.

Second, even in cases where older people move to centers, they may encounter the loss of their traditional family support network. The loss of traditional support for elder kin can result from the participation of women in the work place. Because females in most societies tend to be saddled with the responsibility of providing care to older relatives, the increasing competing demands on their time makes them less available to perform traditional care-giving functions (Malhotra & Kabeer, 2002).

## Living Arrangements

The conception of the family as a couple and their children has resulted in the elderly in the developed world living by themselves as couples, or if separated by death or divorce, for the older individual to live by himself or herself. With a high need for individualism, living alone is quite common, even among those elderly with declining health. However, even within the developed world, wide disparities exist, depending on the socio-economic status and ethnic compositions of the societies in question. For example, poor elderly in individualistic (usually developed) countries who experience serious declines in health or are unable to take care of themselves are often forced to live with their children (Worobel & Angel, 1990). In the U.S., a three-generation family living arrangement is much more likely among African-American, Hispanic, or Asian families than among White Americans (Choi, 1991). Because a greater proportion of the minority groups also happen to be poor, it is difficult to determine whether the multigenerational living arrangements derive from cultural values or economic factors—the need to share scarce resources.

Be it by desire for independence or other factors, the elderly in the developed world tend to increasingly live with their older peers. This has resulted in distinct housing arrangements in the form of age-segregated housing such as *congregate housing* that includes several living options that provide housing only or additional services, including some medical care (Howe, Jones, & Tilse, 2013). One of the most common forms of congregate housing is *apartment complexes* for the elderly that provide certain types of support such as shared meals. Other options include *assisted living* facilities (Scheidt & Schwarz, 2010) that provide support for people who need assistance with such important chores as bathing or taking medications but are otherwise sufficiently functional that they do not need continuous care; and of course, *nursing homes*. There are a number of advantages to these age-segregated living arrangements in the sense that they are designed specifically to allow for care for the needs of the elderly, development of an elderly subculture,

information sharing, and higher levels of social contact and morale (Lawton, Moss, & Moles, 1984). However, other studies have found a number of occupants in these settlements to be lonely and unhappy (e.g., Jacobs, 1974, 1975). Unfortunately, few studies, if any, have examined the effect that living in these communities designed specifically for the elderly has on elder perceptions held by younger members of society and the elderly themselves.

Perhaps owing to the cultural conception of the elderly as part of the extended family in the developing world, it is uncommon for the elderly to live by themselves; even in situations where they do, it is usually not by their own volition. Independent living in the developing world connotes a co-residency arrangement (e.g., Ghana), with the elderly person as the head of the household (Apt, 1996). Just as in the developed world, the developing world is not monolithic. There are co-residency arrangements in which the elderly are not the head of household. In Taiwan, living with a married son is the ideal living arrangement for elderly parents, but here the strongest motive is poor health (Lee, Lin, & Chang, 1995). Even then, there are still very strong expectations that adult children should care for and support their aged parents, and that at least one child co-resides or lives in close proximity to them. Similarly, in the Philippines, most elderly people prefer co-residency with their children (Domingo & Asis, 1995).

Given this desire for co-residency with their children, it is not surprising that very few age-segregated housing arrangements exist for the elderly in the developing world. In a study that examined co-residency of elderly with their adult children in 107 developing countries, Evans and Palacios (2015) found an overall co-residency rate of 78.5%. There was a regional disparity, with the highest rates found in South Asia (89.8%), followed by Sub-Saharan Africa (86.5%). East Asia and the Pacific, and the Middle East and North Africa were also high, with 82.7% and 80.0% respectively. The lowest regional rates were found in Eastern Europe and Central Asia (61.2%), followed by countries in Latin America and the Caribbean (70.5%). The authors attributed co-residency rates to income levels of the elderly; rates are thus higher in countries where pensions are low and safety net programs are few or nonexistent. Thus, co-residency across countries and within countries is negatively correlated with income and welfare measures, with poorer households exhibiting higher co-residency rates. To support this argument, data have shown that multiple generation households were common in the U.S. at the turn of the twentieth century (as high as 72.3% of households by 1888), but declined to 20.7% by 1990 (Costa, 1998). Costa estimated that the income effect may explain as much as 86% of the co-residency decline between 1910 and 1940.

The above data notwithstanding, there is evidence that cultural preferences can and do influence co-residency rates. Especially among collectivist cultures, the family has traditionally taken care of housing needs of the elderly. Cameron (2000) found that in Indonesia, parental earnings or those of their children had little effect on co-residency decisions. However, there can also be an interaction of cultural and economic factors. High co-residency rates in Singapore have been attributed

to tax incentives and housing subsidies provided to children who live with their parents (Chan, 1998). These incentives have been justified on the grounds of both cultural and moral values encouraged by the government. However, as discussed earlier in this section, the prevailing and projected changes in the proportion of the elder population in the developing world, as well as growing rural—urban migration, could present serious challenges to the status quo. Proposals to change current patterns, such as having different housing arrangements, threaten to undermine customs and traditions that individuals expect to be in place when they age. Baihua (1987) reported that in China, the emphasis on family and community resources has hindered the development of long-term facilities intended for elderly people without family or sufficient income. Consequently, it is not uncommon to find as many as three generations of families residing within the same household.

A majority of the elderly in the developing world live in rural areas where it is not very practicable to develop elaborate age-segregated housing arrangements. Some of these occur by default as the young continue to migrate from rural to urban areas in search of wage employment, leaving rural areas disproportionately populated by the elderly. In addition, considering the cost of occupancy in most age-segregated housing schemes, most elderly in the developing world could not afford these housing options due to less established old-age income programs. If changes in demographic patterns and migration bring age-segregated housing by fiat in the developing world, it will be interesting to see how this might affect elder perceptions in these societies. Intergenerational relationships and living arrangements have some bearing on how the elderly view their last days and may play a key role in different conceptions and preparations for death across cultures.

# Death Anxiety: The Fear of Death

Most humans do not willingly welcome the idea of their own or their loved ones' death. In fact, the most common reaction to the thought of dying is fear. Some theorists (e.g., Becker, 1973) have suggested that fear of death is a major motivator of all behavior, with both positive and negative aspects. For almost three decades researchers employing the social psychological perspective have used terror management theory to explain death anxiety (Burke, Martens, & Faucher, 2010; Tam, 2013). The terror management theory (Solomon, Greenberg, & Psyzczynski, 1991, 2004) postulates that both humans and other animals have an instinctive drive for self-preservation. Humans, however, have evolved advanced and complex cognitive abilities that enable them not only to be self-aware, but also to anticipate future outcomes. These sophisticated cognitive abilities make possible the awareness of the inevitability of death—and that it can occur at any time. This struggle/conflict between the desire for self-preservation and the awareness that death is

inevitable and unpredictable can induce feelings of anxiety and terror whenever situations arise that remind them of their mortality. Thus, from the terror management point of view, much of behavior is motivated to deal with this potential death anxiety or terror, and can influence such behavior in both positive and negative ways.

On the positive side, this viewpoint suggests that people who are afraid of dying tend to do whatever it takes to ensure that they stay alive. Staying alive contributes to the continuity and socialization of the species because people so driven are more likely to want to have children and to raise them according to their society's acceptable standards. This is perhaps why every president of the United States tries to make an enduring contribution that would be recorded as a legacy of his administration. However, the same death anxiety, if not properly handled, can become a destructive force and could even result in both physical and mental problems. According to Fortner and Neimeyer (1999), high levels of death anxiety in older adults are associated with lower ego integrity and more physical and psychological problems compared to individuals with low death anxiety.

Death anxiety is a multifaceted construct that is difficult to define but has been conceptualized to include: fear of death of oneself; fear of death of others; fear of dying of self; and fear of the dying of others. Fear of death of oneself has to do with the fear of the event of death and comprises such things as what happens to the individual after the experience of death. To some individuals, it could be fear about judgment—whether one would go to heaven or hell, fear of cremation, earth burial, the donation of one's body to science, and what might happen to people and possessions that one may leave behind, including one's spouse, children, and businesses.

Fear of death of others encompasses the apprehension by an individual of death occurring to significant others in one's life, especially family members and friends. Fear of dying of one's self differs from fear of death of one's self in the sense that the former refers to the process of dying while the latter involves the event of death. A good number of people are not afraid of death itself, but are extremely anxious about how they will die. Anxieties here revolve around the notions of wasting away, the possible deterioration of one's physical appearance, and the pain that may be associated with dying. It is not uncommon for some to also worry about the possibility of being a burden to others, both in terms of time and financial costs. Fear of dying of others is similar to the fear of dying of self, the difference being that the person in question may have anxieties about the process of dying of significant others in his or her life.

In addition, each of these components can be examined at the public, private, and nonconscious levels. Thus, the fears about death that we may relay publicly may differ from what we may believe and express privately, which may be different from the fears that we may not, ourselves, be consciously aware that we are exhibiting. The complexity of this construct suggests that death anxiety is likely to

manifest itself in various ways. One of the most obvious ways in which we display death anxiety is through avoidance (e.g., Kastenbaum, 1999). Avoidance may involve a public as well as a conscious manifestation of death anxiety. Some people consciously refuse going to funerals or visiting friends and loved ones who are dying because it makes them uneasy or uncomfortable. Unconsciously, the person may avoid doing so by claiming he or she is too busy to attend to these obligations. Other people may display death anxiety by engaging in activities that seem to confront or defy death (Kalish, 1984). These people may repeatedly engage in risky activities such as skydiving, rock climbing, or becoming soldiers of fortune. Death anxiety can also manifest itself through changes in lifestyles, use of humor, or getting involved in jobs that deal with death such as funeral parlors or retirement facilities for the very old. Alternatively, individuals may make changes in their physical appearance. This could explain why some people choose to undertake cosmetic surgery to make themselves appear younger; the (probably) unconscious underlying motive could be to ward off the anxiety that death might be approaching (Tam, 2013).

Death anxiety is not prevalent to the same degree across cultures. Roth (1978) suggested that death anxiety is related to how old age and the aged are perceived in a given society. According to Roth, the elderly in the U.S., unlike in some Asian societies such as Japan where the elderly are respected and their advice valued, are not held in high regard and are constantly confronted with evidence that they are of very little value. Many older adults end up in retirement villages and other age-segregated living arrangements that deprive them of much needed beneficial stimulation from younger people, resulting in diminished self-esteem. Because their worth to the community is diminished, the elderly perceive a rather relentless push toward extinction. "Death is the compact expression of all anxieties of aging and of the troubles that older persons endure" (Roth, 1978, p.557). Thus, one would expect higher levels of death anxiety in societies where the elderly are valued and held in high esteem than in those where older adults are devalued (Gire, 2014).

As stated earlier, death anxiety is a multifaceted concept; therefore, differences may exist between cultural groups or ethnicities on different aspects of death anxiety. In a study using a multifaceted measure called the Multidimensional Fear of Death Scale (MFODS; Hoelter, 1979; Neimeyer & Moore, 1994), DePaola, Griffin, Young, and Neimeyer (2003) found significant differences between elderly African Americans and Caucasian Americans on different dimensions rather than on more global death concerns. Specifically, older Caucasians showed higher death anxiety on the MFODS Fear of the Dying Process subscale than their African American counterparts. Some possible interpretations of this result are consistent with the varying effects that living arrangements can have on perceptions of old age and elder well-being. According to Depaola et al. (2003) death anxiety about the process of dying may be higher in Caucasian American elderly because the majority of Whites are likely to die in hospitals, nursing homes, hospices, or other

institutions (Aiken, 1995). Thus, older Caucasians may fear dying in hospitals or nursing homes where they are likely to be isolated from family members. Another reason for this difference may be related to the finding by Hummert and Nussbaum (2001) that dying patients who are able to communicate report that they often suffer moderate to severe pain during the last weeks of their lives that did not seem to be alleviated by medication. Therefore, the fear of a prolonged and painful dying process, particularly for older adults who are institutionalized, may be a rational response to their experiences. It also could explain why Caucasian families are more receptive of palliative care interventions at the terminal stages of their lives.

In contrast, African American participants in the DePaola et al. (2003) study were more anxious than their Caucasian counterparts on the Fear of the Unknown, Fear of Consciousness When Dead, and Fear of the Body After Death subscales of MFODS. According to the authors, these are fears that might dispose elderly African Americans toward extending life by any means possible. This interpretation appears to be supported by the research finding that African Americans are more likely than Caucasians to want aggressive treatment at the end of life (Mouton, 2000). It might also explain the reluctance of elderly Black individuals to utilize hospice care, as they are likely to perceive palliative care as somewhat synonymous with a denial of care. However, African Americans show very little anxiety about comfort care at the end of life, probably due to the traditional involvement of the family in providing care and support during terminal stages of their illness (Brown, 1990). Thus, differences in death anxiety and related aspects of elder well-being among ethnicities are associated with intergenerational relationships, living arrangements, and other variables.

An interesting question that has arisen in the discussion of cultural or societal differences in death anxiety has centered on the factors underlying these differences; in other words, what are the variables within cultures that give rise to differences in death anxiety? A theoretical framework for explaining cultural differences in death anxiety derives from the terror management theory (Solomon et al., 1991, 2004). As discussed earlier; this theory suggests that humans have a profound fear of death, and in order to cope with this fear, have created a number of world views, such as belief in life after death, in order to manage this anxiety. Not surprisingly, religiosity as a cultural variable has received one of the most extensive examinations with respect to death anxiety. The underlying premise is that people from cultures whose religious beliefs encompass a belief in afterlife would express less death anxiety compared to those in which afterlife beliefs do not form an important part of the religion.

Empirical examination of the relation between religiosity and death anxiety has yielded mixed results, at best. Duff and Hong (1995) conducted a survey of 674 older adults and found that death anxiety was significantly associated with the frequency of attending religious services. This factor was particularly related to the belief in life after death. For example, Alvarado, Templer, Bresler, and Thomson-Dobson (1995) found a strong negative correlation between death

anxiety and belief in afterlife. That is, as the degree of certainty in afterlife increased, levels of death anxiety decreased. This basic result was more explicitly replicated in later research by Wink (2006), who studied predominantly Caucasian Christian, elderly people in the U.S. He found that the relation between religiousness and death anxiety was not as straightforward as may have been implied by previous studies. Rather, religiousness interacted with a strong belief in a rewarding afterlife in predicting death anxiety. Specifically, the consistency between a person's religious beliefs and afterlife, rather than religiousness per se, predisposed the individual to fear or not fear death. Neither variable by itself was a good predictor of death anxiety.

In a cross-cultural and cross-religious exploration of the belief in afterlife variable, Parsuram and Sharma (1992) compared people of three different religions in India: Hindus, Muslims, and Christians. They found that Hindus (who had the greatest belief in life after death) also tested lowest in death anxiety, followed by the Muslims, while the Christians showed the highest death anxiety. A few years later, Roshdieh, Templer, Cannon, and Canfield (1999) studied death anxiety and death depression among 1,176 Iranian Muslims who had war-related exposure during the Iran-Iraq War. They found that those who scored higher on death anxiety were those who also had weaker religious beliefs, did not believe in life after death, and did not assert that the most important aspect of religion is life after death.

A plausible explanation for these sometimes contradictory findings comes from the fact that roughly 95% of these studies have used written questionnaires (Neimeyer, Moser, & Winkowski, 2003). An additional complication is that with the exception of a few studies (e.g., Abdel-Khalek, 2002), very few of the instruments used in studies of death anxiety ask the "why" question, so that we see differences in death anxiety without a clear understanding of the reasons underlying these differences. In a study that was more nuanced with respect to religiosity and the belief in afterlife death component, Morris and McAdie (2009) compared Christians, Muslims and a non-religious group on death and hypothesized that followers of the two religious groups (both incorporate a belief in afterlife) would score lower on death anxiety than the non-religious group. Some of the findings were unexpected—Christians scored significantly lower on death anxiety than both Muslims and the non-religious group. However, Muslims scored significantly higher than the non-religious group. A closer examination of the responses showed that whereas the Christian participants in the sample dwelt on themes of heaven and eternal life, Muslim participants showed uncertainty in the outcomes in the afterlife. Some of the Muslim participants indicated that they did not know whether they were good Muslims, and thus were unsure of their ultimate fate—whether they would go to heaven or hell. These results, in line with Rose and O'Sullivan (2002), suggest that it is the reward expectation of afterlife rather than a mere belief in it that is associated with low death anxiety. If a person believes in life after death, but also expects to encounter punishment and not reward, the person would likely display much higher death anxiety than even those who do not believe in an afterlife.

A reasonably clear picture appears to have emerged from the foregoing findings: studies on death anxiety need to go beyond simply learning whether people in certain cultures score high or low on death anxiety, but should strive to identify the underlying factors responsible for a given score. This could entail using more indepth approaches to exploring this construct. Using an ethnographic approach, Kawano (2011) examined death anxiety and attitudes toward personal death among members of the Grave-Free Promotion Society (GFPS) in Japan. Historically, most Japanese funeral rites have required the deceased to be cremated and the ashes put in a jar and buried in a family plot to be cared for by the oldest male in the family. This ritual is believed to be critical in the transformation of the deceased to the status of a venerated ancestor. The concern here was that the peaceful rest and successful transformation of the dead would be seriously compromised if the family (the oldest male in particular) failed to acquire and care for the burial place at the family plot, the desired resting place.

However, societies across the globe have witnessed tremendous changes over the last few decades, both in the immediate and broader society reduction in family size, industrialization, and urbanization, and Japan is no exception. Consequently, there have been fewer people left to carry out these post-death functions, and a reduced likelihood of finding grave successors. Even the families with older males willing to play this role have at times found themselves in cities far away from the family burial sites, increasing the likelihood of compromising the proper care of the deceased. Thus, death anxiety was high among families that did not meet these criteria; the inference was that they too, upon their death, would not make the desired transition to the venerated status of ancestor, or would have to burden family members or willing strangers to carry out the tradition. The GFPS was a movement to cremate the deceased and scatter their ashes, thus returning the dead to nature, instead of conventional interment of cremated remains in a family grave. Finding an alternative to the traditional burial practice has substantially reduced death anxiety among members of the GFPS. These results suggest that death anxiety among this group was not due to lack of acceptance of their mortality, but arose from their inability, at the time, to find an acceptable plan to accommodate their concerns about what would transpire after their death. This is an important distinction, for it implies an anxiety that was unrelated to the person's fear of dying or the process of dying. Instead, the anxiety emanated from what would become of the person long after they are gone, given the uncertainty of identifying family members willing and able to perform these important posthumous rituals.

Although few studies have empirically compared cultural groups on variables other than religion, we can extrapolate from most of the research findings that death anxiety will be relatively lower among death-affirming societies than among death-denying or death-defying cultures. The U.S., probably like most Western societies, is a death-denying/defying society where even the idiom of expression is

that of resistance. This stanza from a poem by Dylan Thomas (1937/1971) aptly captures this resistance:

Do not go gentle into that good night, Old age should burn and rave at close of day; Rage, rage against the dying of the light. Though wise men at their end know dark is right, Because their words had forked no lightning they Do not go gentle into that good night. (pp. 207–208)

People also conjure images of fighting illness, or fighting the enemy (death) (Kalish & Reynolds, 1981). On the other hand, other societies appear to be more accepting of death. Such acceptance ought to manifest itself in lower death anxiety levels—a notion that appeared to be validated by Benton, Christopher and Walter (2007), who found a relation between the aging anxiety dimensions of physical appearance concern, the fear of losses, and death anxiety. Aging and the impending death of individuals need not result in death anxiety, and even if or when they do, the impact could be positive or negative, depending on the individual and the cultural environment in which the individual finds himself or herself. Thus, like the other variables associated with aging, culture influences death anxiety and may have an effect on elder well-being.

#### Conclusion

Aging is an inevitable aspect of the developmental process. However, all people do not age the same way; whereas some maintain considerable physical agility and robust health into the late stages of adulthood, others show obvious physical declines quite early and struggle with numerous health problems. Both physical and psychological variables combine to influence the experience of aging. The manner in which the elderly are perceived in society varies widely across cultures. These perceptions appear to be shaped by such factors as demographic patterns and transitions resulting from a rapidly increasing elder population, reducing support ratios, economic transformation, the roles assigned to the elderly by their cultures, intergenerational relations, and living arrangements.

These perceptions, in turn, affect attitudes that other members of society have about the elderly and how the elderly feel about themselves, thus affecting overall well-being of older adults, including longevity. One way of improving the quality of life of the elderly might involve inducing positive attitudes toward older adults by maintaining cultural practices (e.g., advice-giving, family connections) that promote positive perceptions while changing those (e.g., segregation, isolation) that tend to yield negative perceptions and unfavorable attitudes toward older citizens.

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### Part IV

## Cognition

Although differences in cultural customs and practices, including those related to cognition, have sometimes been attributed to differences in physical characteristics across peoples, the fact remains that culture and cognition are intimately interconnected. This observation may well be the central message of Part IV, Cognition. Culture and the human brain have co-evolved, with cultural experience exerting influence on the organization of the brain and, reciprocally, the brain's organization influencing culture. The result is that cultural practices produce variations in cognition and culture provides the tools for human thought and action.

In a parallel way, we will see that, just as culture influences education, so too does education play a role in cultural understanding. And how does education influence cultural understanding? Is it superficial, providing a simple understanding of such features as food, dress, and festivals? Or can education provide a deeper understanding—perhaps through significant interpersonal exposure, travel, and other experiences that truly use diversity as an important resource?

The relation between culture and cognition can be seen at basic levels, including perception. As we will see in this section of the book, researchers have long been interested in cultural variations in perception, as evidenced in work conducted more than a century ago. Could culture play a role in the ability of people to judge the length of lines, or to perceive colors, or to recognize photographs or drawings of common objects? The research on these questions and others like them is sometimes surprising and always intriguing.

Cross-cultural psychology has perhaps not given the attention it should have to intellectual disabilities. The past generation has brought a revolution in cultural views of people with intellectual disability. Individuals with disability are more

likely to be integrated in their cultures, and to receive the rights afforded other citizens. Yet people with intellectual disability still do not have opportunities for full cultural inclusion, equal treatment, and opportunities to determine important aspects of their own lives. These are issues of concern around the world, and international groups are working to achieve consensus in such areas as rights, services, financing, and policy.

### Culture and Cognition

#### Michael Cole and Martin Packer

From the earliest recorded accounts of people from one society meeting those from another, it is clear that such encounters engender the strong intuition that "those people" are fundamentally different than "we are." Often the word used to designate "us" is akin to "the human beings" while "they" are barbarians (Herodotus, 440 BCE/2003). "They" make funny noises when they speak, they eat peculiar foods, and they live in ways that seem exotic and often inferior (see Chapter 2, this volume).

In the modern world, the academic study of this apparently universal tendency to evaluate others as somehow fundamentally different than we are is the province of psychologists who study the role of culture in human life (Cole, 1996; Kitayama & Cohen, 2007; Valsiner & Rosa, 2007). While, in the past, apparently deep and pervasive differences in modes of life and behavior were attributed to some deep, genetic variation associated with the concept of race, today it is recognized that whatever variations in skin color, hair, height, and other physical differences may distinguish members of different social groups, the variations that give rise to the intuition of fundamental difference in the accumulated knowledge of a social group are the exosomatic—external to the body—the inheritance of the accumulated experience of earlier generations of that group. They are, that is, to say, culturally organized, learned patterns of behavior, embodied in the group's everyday practices, institutions, norms and values, that, as an ensemble, create the mutual obligations central to social life.

In this chapter we examine the relation between culture and cognition, in terms of three distinguishable levels of social grouping: (a)human beings as a mammalian species; (b) societies (thought of as the population of a particular geographical and political region which shares cultural features); and (c) cultural practices

(thought of as recurrent ways of accomplishing valued social activities in concert with one's proximally circumscribed social unit). These levels are not independent. It is helpful to think of each "smaller" unit of cultural analysis as connected to, often embedded within, more inclusive levels.

It is also essential to look upon culture as a process occurring over time. Just as geopolitically defined populations can be thought of as branches of a tree of human life extending back to *australopithecus*, the first bipedal ancestor to modern humans around four million years ago, so the cultural practices characteristic of a society represent various "ways of doing and thinking" that people have inherited from prior generations of "their kind" to organize everyday life. Hence, the study of culture and cognition requires a *developmental* analysis that extends across the domains of phylogeny (evolution), cultural history, ontogeny (the development of an individual), and micro-genesis (the moment-to-moment organization of daily human life) (Vygotsky, 1930/1997). Specifying the linkages among specific cultural practices within more inclusive sociocultural formations, and the linkages of those sociocultural formations within historically formed modes of life, is a major ongoing challenge to the study of culture and cognitive development.

Our presentation is organized as follows. We begin by providing working definitions of the core concepts of culture, cognition, and development. We then consider cognition at each of the synchronic levels of sociotemporal grouping associated with culture: cultural universals as they relate to human beings as a biological species, the cultural styles of large populations and social groups considered as historical configurations arising in particular ecological conditions, and cultural practices within social groups which, we will argue, are the proximal locus for the formation of both culture and cognition. Within each level, we introduce developmental considerations as they become relevant. We end by considering crucial issues that must be resolved in order to arrive at a more systematic understanding of the generality of cultural patterns across populations, their sources, and their consequences for cognition.

## **Culture, Cognition, and Development: Some Definitional Considerations**

In its most general sense the term *culture* as applied to human beings refers to the socially inherited body of past human behavioral patterns and accomplishments that serves as the resources for the current life of a social group (D'Andrade, 1986a). Although scholars usually agree that culture constitutes the social inheritance of a population, anthropologists have been divided in whether they focus on culture as "something out there" (the "manmade part of the environment"; Herskovitz, 1948, p. 17) or as "something inside the head" ("what one needs to know to participate acceptably as a member in a society's affairs"; Goodenough, 1994, p. 265).

At present, many anthropologists and psychologists seek to transcend thinking about culture as either exclusively "ideal" or exclusively "material." For example, in linking culture and cognition, Geertz (1973) emphasized that human thought is basically both social and public—that its natural habitat is the house yard, the market place, and the town square. Thinking consists not of "happenings in the head" (though happenings there and elsewhere are necessary for it to occur) but of trafficking in significant symbols—words for the most part but also gestures, drawings, musical sounds, mechanical devices like clocks (p. 45).

Our own proposal for transcending the ideal-material dichotomy with respect to culture is to think of culture as a dynamically changing environment that is transformed by the artifacts created by prior generations, extending back to the beginning of the species. As we employ the term, an artifact is an aspect of the material world that has been modified over the history of its incorporation into goal-directed human thought and action (Cole, 1996). By virtue of the changes wrought in the process of its creation and the way in which it has been appropriated as a tool of human thought, an artifact is simultaneously ideal (conceptual) and material. It is material in that it is embodied in physical form, whether in the morphology of a spoken, written, or signed word, a ritual, or an artistic creation, or as a solid object such as a pencil. It is ideal in that this material form has been shaped by historical participation in the (successful, adaptive) human activities of which the artifact was previously a part and which it mediates in the present. D'Andrade (1986b) made this point when he wrote that "Material culture—tables and chairs, buildings and cities—is the reification of human ideas in a solid medium" (p. 22). The basic function of these artifacts and their deployment in various cultural practices is to coordinate human beings with the physical world and each other; in the aggregate, culture can be seen as the species-specific medium of human development, a medium which organizes and configures the human nervous system for interaction with the world.

This conception of artifacts extends to what Wartofsky (1973) referred to as secondary artifacts, representations of primary artifacts and their modes of use. Secondary artifacts play a central role in preserving and transmitting the kinds of social inheritance referred to as recipes, beliefs, norms, conventions, and the like. This extension brings the mental entities psychologists refer to as schemas or scripts into contact with their material instantiation in practical life. The term schema is ordinarily used by psychologists to refer to a mental structure that represents some aspect of the world. We find it more useful to adopt Bartlett's (1932) notion of schemas as conventions, because this usage emphasizes that schemas are simultaneously aspects of collective material practices and of mental structures/ functions. Scripts are an especially important kind of schema for the purposes of thinking about the role of culture in cognitive development because they represent the everyday, culturally organized events in which people participate. A script is an event schema that specifies the appropriate people who participate in that event, the social roles they play, the objects they use, and the sequence of actions and causal relations they perform (Nelson, 1986).

Both Bruner (1990) and Nelson (1981, 1986) accorded an important role to such event representations in cognitive development. Nelson (1981) referred to scripts as a "generalized event representation" (p. 101). In her view, which we share, scripts provide "a basic level of knowledge representation in a hierarchy of representations that reaches upward through plans to goals and themes" (p. 101). In her work on children's acquisition of event representations, Nelson highlighted other important properties of scripts as fundamentally important cultural artifacts. First, event schemas serve as guides to action. When someone participates in a novel event, they must seek an answer to the question, "What's going on here?" For example, once children acquire even a crude idea of the appropriate actions associated with going to a restaurant, they can enter the flow of this particular event with partial knowledge, "playing their role," which gets enriched in the course of the event itself, facilitating later coordination in new, unfamiliar events of a similar kind. As Nelson (1981) pointed out, "Without shared scripts, every social act would need to be negotiated afresh" (p. 109). Nelson also made the important observation that children grow up within contexts controlled by adults and hence they participate in and are coordinated by adult scripts. By and large, adults arrange the conditions for children's experiences, including culturally appropriate goals, rather than engage in direct teaching (Whiting, 1980). In effect, they use their notion of the appropriate script to provide constraints on the child's actions and allow the child to fill in the expected role activity in the process. In this sense, "the acquisition of scripts is central to the acquisition of culture" (Nelson, 1981, p. 110).

According to Bruner (2002), scripts are best considered constituents of a narrative. In his view narrative, the linking of events over time, lies at the heart of human thought. The re-presentation of experience in narratives provides a frame ("folk psychology") enabling humans to interpret their experiences and each other. If it were not for such narrativized framing, "we would be lost in a murk of chaotic experience and probably would not have survived as a species in any case" (Bruner, 1990, p. 56). Narrative has its correlates at the neurophysical level, as Luria (1974) has pointed out: he argued that all action involves a "kinetic melody," a smoothly patterned sequence of movements which, like narrative, organizes the purposive aspect of action into an integral embodiment. A kinetic melody represents not only the coordination of various afferent and efferent neural systems (those carrying messages to and from the brain respectively), but also their amalgamation with meaningful, skilled movements learned over time, enabling one to interact with, and act on, the world. A kinetic melody, therefore, illustrates the interpenetration of the cultural and the neural and provides an interwoven, dynamic unit of analysis that avoids reducing behavior to biology and opens the way to analysis of the ecological complexity of human experience. There is growing interest in "cultural neuroscience" (Han & Ma, 2015; Kitayama & Huff, 2015; Kitayama & Salvador, 2017; Sasaki & Kim, 2016), and although we do not have space for a detailed treatment of this literature, we will describe some relevant studies.

We have devoted most of this section to a discussion of the definition of culture because this is central to our purpose in this chapter, but similar complexities apply to the definition of cognition and development. Generally speaking, the term *cognition* applies to the processes of acquiring and deploying knowledge in a variety of manners, such as perceiving, attending, remembering, reasoning, linguistic ability, and so on. Equally generally, *development*, as psychologists use that term, refers to changes over time: both quantitative "growth" and qualitative change in the individual and how the person interacts with the physical environment and other people. Each of these concepts, no less than the concept of culture, is thoroughly saturated with theoretical commitments. For present purposes, we background such considerations to foreground the role of culture in the process of cognition, treating them in as neutral a fashion as possible.

#### **Culture and Cognitive Development: Universal Processes**

Because of evidence for the presence of culture among the hominid precursors of modern humans for many hundreds of thousands, if not millions of years prior to the emergence of *Homo sapiens*, it is inappropriate to juxtapose human biology and human culture. The human brain and body have co-evolved over a long period of time with our species' increasingly complex cultural environment (Laland et al., 2015). The implications of this co-evolution of human culture and human biology were aptly summarized by Geertz (1973), who argued that as a result of their tangled relations in the course of human phylogeny, culture and biology are equally tangled in the course of human ontogeny:

Rather than culture acting only to supplement, develop, and extend organically based capacities logically and genetically prior to it, it would seem to be ingredient to those capacities themselves. A cultureless human being would probably turn out to be not an intrinsically talented though unfulfilled ape, but a wholly mindless and consequently unworkable monstrosity. (p. 68)

At the time, Geertz was arguing from scanty data, but contemporary studies of hominization, the process of becoming human, have made clear the general principle that the contemporary human brain co-evolved with the accumulation of culture (Kim & Sasaki, 2014). As Quartz and Sejnowski (2002) declared, culture "contains part of the developmental program that works with genes to build the brain that underlies who you are" (p. 58). Donald (2001) made the same point in slightly different terms: "Culture actually configures the complex symbolic systems needed to support it by engineering the functional capture of the brain for epigenesis" (p. 23).

According to this logic, culture does not act independently of biological processes during ontogeny. Rather, one needs to speak of "bio-cultural co-constructivism" (Li, 2006): the theoretical position that *both* culture, the historically accumulated, human-made part of the environment which greets a newborn at birth, *and* biological processes with a long phylogenetic history, operate simultaneously and interactively during ontogeny to provide the conditions for all of development, including its cognitive aspects.

#### The Universality of Culture

With these considerations in mind, it should be clear from its place in the common history of *Homo sapiens sapiens* that culture plays a central role in cognitive development, regardless of which particular culture a child is born into. First, and most obviously, culture provides a vast storehouse of partial solutions to problems that human beings have previously encountered and solved (Hutchins, 1995). Put differently, culture provides a vast storehouse of tools to think and act with. While such tools/solutions routinely need modification because humans must constantly deal with changing circumstances, human infants do not encounter a world created *de novo* just for them. Rather, theirs is a world culturally prepared to provide them with cognitive resources, just as phylogeny has pre-adapted them to require and acquire such resources.

Second, the world that greets the newborn is a social world, populated by persons who have already acquired a great deal of the cultural knowledge that the child is going to have to acquire, and whose behavior is already shaped by this knowledge. The entire pattern of the child's early experiences takes place in an intricately choreographed set of scripted events, mediated by its caretakers using artifacts embodying the society's cultural heritage. These cultural resources include practices for organizing babies' experiences so they will, in time, come to play the same role in the social group's next generation that their parents and older kin are currently playing, and that they will take their turn at organizing the experience of the next generation of children who will make possible the social group's continuation.

Our emphasis on culture as preceding the child as a set of resources arranged by adults who are heavily invested in the child's development should not distract attention from a third universal way in which culture plays an essential role in cognition. It requires active efforts by children to acquire the necessary cultural knowledge to become competent members of the social group, and thus to reduce their dependence on the ministrations of others and maximize their own potential to conduct their lives on their own terms. In short, children must learn to control their own behavior and their environments using the same cultural resources that their elders use if they are to thrive as members of the social group. From this perspective, cognitive development is a process of children learning to control the

world and themselves by appropriating the cultural resources made available to them since birth by their families and community. If the process is successful, they will eventually add to, and perchance transform, this set of cultural resources during the unforeseeable events of their own lives.

In summary, when considering the universal features of culture in human cognition what one sees is a three-sided process in which the social inheritance of the past is made available to children at birth in an ongoing process of enculturation which requires that both the social world and the child actively engage with their social inheritance and each other so that the child will become a competent adult member of the social group.

#### Designs for Living and Cognitive Style

At present, the most common way of studying the relations between culture and cognition is to make comparisons among populations in terms of cultural modes of being that are assumed to operate pervasively across particular cognitive domains. Often the populations selected are assumed to represent an entire society or nation, and sometimes even an entire civilization. For example, Nisbett and Masuda (2003) set out to compare the cognitive properties of societies descended from the Greek tradition with those of East Asian origin. Psychologists who conduct research at this level of cultural generality make a key assumption—that a society provides people with a shared, coherent, pervasive way of knowing and acting in the world around them. The anthropologist Ruth Benedict (1934) stated this assumption clearly, in her well-known statement concerning patterns of culture:

A human society must make for itself some design for living. It approves certain ways of meeting situations and certain ways of sizing them up. People in that society regard these solutions as foundations of the universe. They integrate them no matter what the difficulties. Men who have accepted a system of values by which to live cannot without courting inefficiency and chaos keep for long a fenced-off portion of their lives where they think and behave according to a contrary set of values. They try to bring about more conformity. They provide themselves with some common rationale and some common motivations. *Some degree of consistency is necessary or the whole scheme falls to pieces.* (p. 53, emphasis ours)

Benedict's belief that the coherent shared patterning of psychological life is made possible by the cultural environment, and that each society's "design for living" provides its members with a system of values that ensures consistency, motivation, and rationale in their actions (ways of meeting situations) and conceptions (ways of sizing them up), has been the basis since the middle of the twentieth century for a large program of cross-cultural work that has been termed an "eco-cultural" psychology (Berry, 2015; Weisner, 2018; Worthman, 2016).

The basic logic of this approach is to relate psychological patterns, on the one hand, to the sociocultural-ecological circumstances of the group, on the other. These ecological circumstances are then assumed to establish the conditions within which configurations of economic activity/technology and social organization (kinship and the division of labor of adults) arise. These circumstances influence child-rearing practices which in turn shape the psychological characteristics of the children. Children are assumed to internalize the characteristics of their elders, owing to the patterned process of socialization they have undergone, and in this way given cultural designs for living are reproduced over generations (of course there will be at times changes in ecological circumstances, and these can be expected to instigate cultural changes, at a greater or lesser rate, that will in turn lead to patterned cognitive changes).

These cultural designs for living are assumed to be apparent in the individual in the form of what are referred to as cognitive styles. A variety of terms has been used to characterize the cognitive styles associated with different cultural designs. Borrowing from Witkin (1967), Berry and his colleagues (Berry, 1976; Berry et al., 1986) coined the contrasting terms "field dependent" and "field independent." More recent research in this tradition has used such contrasts as "analytic/ holistic," and "independent/interdependent" or "collectivism/individualism" (Kitayama & Cohen, 2007; Oyserman, 2017). Although the specifics of the different approaches vary, as do the various tasks they use to assess the core cognitive styles, there is general agreement that cognitive styles apply across a wide spectrum of traditional psychological functions or processes, including perception, attention, reasoning, categorizing, self-construal, social inferences about others, and so on. Unlike cognitive abilities, such as IQ, which are typically considered in terms of degree along a single dimension, cognitive styles have typically been considered in terms of a bipolar scale, having two poles or extremes, each of which is a distinct cognitive style, a distinct tendency to behave in a certain manner.

#### Cognitive styles as field dependence/field independence

The early work of Berry, Witkin, and their colleagues set out to demonstrate that people in some cultures are more "field dependent" while those in other cultures are more "field independent," and to discover the relation between culture and cognition which leads to this difference. To say that a person is field dependent means they are more heavily influenced by the context in which stimuli are presented, or in which specific events of interest occur (Berry, 1976). "Field independence" means that perception of or cognition about a stimulus is not influenced by the context or setting. Field dependence in the perceptual and cognitive realms was operationally defined and experimentally tested using the Rod and Frame Test (RFT) and the Embedded Figures Test (EFT). The RFT consists of a rod inside a frame, both of which are moveable, and the participant must adjust the rod to what they consider a true vertical position as the position of the frame is changed. A field dependent person will judge whether or not the rod is vertical with

reference to the frame that surrounds it, rather than relative to the floor or to their bodily position. The degree of error (the number of degrees away from 90) provides the measure of field dependence. The higher the score, the more field dependent the participant is considered to be. The EFT requires finding simple forms which are embedded in larger figures. Here, the field dependent person will have more difficulty separating the forms from the enclosing figures. The score is the average time in seconds to detect the simple forms, as well as the total number of correctly disembedded forms found within a fixed amount of time.

Greater time and more incomplete tasks reflect greater difficulty in analyzing a part separately from a larger pattern, or viewing an object distinct from its context. Alternatively, they reflect a greater tendency to perceive complete patterns rather than their separate components. Both are more the case for the field-dependent cognitive style.

In the social realm, it was predicted that field-independent people would experience themselves as separate and distinct from others, that they would depend largely on internal referents, and that they would be more autonomous in their social relationships than field-dependent people. Or, to put the point in more contemporary terminology, a field-independent person's reasoning about themselves and others would be more focused on an autonomous agent, while a field-dependent person's reasoning would be more focused on an agent whose actions are importantly contingent on the social group.

In a pioneering study, Berry (1976) tested these ideas by gathering data from 18 subsistence societies ranging from West Africa to northern Canada and Australia, and from three industrialized groups. He used data from the Human Relations Area Files (HRAF) to code information about the ecological circumstances and culture of origin, as well as indications of acculturation to the larger national group of which the smaller group was a part, in order to obtain evidence concerning key elements of the ecocultural model.

Berry and his colleagues purported to assess cognitive style in both the cognitive and social domains by administering the tests we have described. He interpreted the results as supporting the ecocultural model relating environment, social structure, cultural practices, and cognitive style. Berry and his colleagues have gone on to use this approach extensively (Mishra & Berry, 2018; Mishra, Kanoujiya, & Yadav, 2017). In recent years, as intercultural contact has accelerated in connection with the historical process referred to as globalization, several approaches to cognitive styles have blossomed, exploring a variety of psychology phenomena.

#### Cognitive styles as kinds of self

Kitayama and Cohen (2007) proposed that there is a basic distinction among the many societies on this planet between those that are "collectivist" and those that are "individualist." This way of describing cultures has a long history, not only in psychology but in sociology, anthropology, philosophy, and history. Individualistic cultures are generally considered to be ones in which the single human being is the

fundamental building block of society, in which self-reliance and competitiveness are valued, and people are encouraged to cultivate their independence, self-reliance, and autonomy. Collectivist cultures, in contrast, are ones in which emphasis is placed on the group or community, commitment and group protection are emphasized, social norms and duties are valued, and people are encouraged to foster conformity and responsibility. Triandis (1988) suggested that this distinction is "perhaps the most important dimension of cultural differences in social behavior across the diverse cultures of the world" (p. 60). Hofstede (1980) identified four fundamental dimensions of cultural difference—power distance, masculinity, uncertainty avoidance, and individualism (later a fifth was added: long-term orientation). Of these, individualism has attracted by far the most attention.

An important contribution to this line of work was made by Markus and Kitayama (1991). They explored the psychological implications of individualist and collectivist cultures and suggested that they foster two distinct kinds of self: *independent* and *interdependent* selves respectively. Markus and Kitayama hypothesized that these two kinds of self would show differences in cognition, emotion, and motivation. They also pointed out the likely connection with cognitive style, noting that

Witkin and his colleagues described a field dependent person as one who includes others within the boundaries of the self and who does not make a sharp distinction between the self and others. Many of the empirical findings ... about the interpersonal expertise and sensitivities of field dependent people are similar to those described herein for people with interdependent selves. (p. 247)

Since the 1980s, the interest in individualism and collectivism has grown enormously. The basic idea of Witkin and Berry (1975), that culture produces a specific manner or style of thinking that spans all psychological domains, has been elaborated upon well beyond the confines of their earlier theory and the data used to substantiate it.

#### Is the United States an individualistic culture?

An additional question about the research using cross-cultural comparisons to explore cultural influence on cognitive style concerns the legitimacy of its underlying claim that Eastern and Western cultures differ broadly and deeply on the collectivism–individualism dimension. It is generally assumed the United States is a highly individualistic culture, indeed, some have gone so far as to question the cross-cultural validity of psychological research as a whole because so much of it has been conducted with Americans. Oyserman, Coon, and Kemmelmeier (2002) explored the question of whether Americans are more individualistic and less collectivistic than people in other cultures with a meta-analysis of 83 studies. They found that generally the data support the claim that Americans—or at least European Americans—differ on measures of individualism and collectivism when

compared with people from other countries. However, they cautioned that "the empirical basis for this conclusion is not as firm as might be desired or as casual reading of textbooks in psychology would have the reader believe" (p. 43). The differences are not large, and they are not systematically patterned. In addition, researchers differ widely in the ways they define these characteristics. They have used different instruments to measure them, have studied small and selective samples and generalized to whole nations, and have frequently worked only with university students, who are unlikely to be representative of their society as a whole. Sometimes they have not measured these characteristics at all and simply compared people from two groups that they have *assumed* differ in collectivism or individualism or both (so they have ignored the other dimensions of cultural difference that Hofstede (1980) and others have pointed to). The consequence is "an emerging cultural tower of Babel in which cultural psychologists are quick to declare any cross-national differences to be 'cultural' and any cultural differences to be within the purview of IND–COL theory" (Oyserman et al., 2002, p. 44).

Oyserman (2006) also pointed out that cultures may vary independently on individualism and collectivism, so these are apparently not opposite poles on a bipolar continuum. Latin Americans, for example, are high on collectivism but also high on individualism. Although Americans are individualistic in their responses to standard measures, they also show collectivist characteristics, such as valuing group membership and seeking advice from others. Furthermore, the evidence suggests that European Americans are less individualistic than African Americans. This highlights the likelihood that people in different subgroups and social strata differ in their socialization processes and their psychological characteristics. In short, the research comparing countries paints only a moderately convincing picture of national differences along an axis of individualism—collectivism, and only a moderately high degree of individualism among Americans.

#### Analytic versus holistic cognitive styles

Nisbett and colleagues (Nisbett & Masuda, 2003; Nisbett, Peng, Choi, & Norenzayan, 2001; Peng & Nisbett, 1999) have argued that sociocultural differences among societies have effects not only on their members' beliefs about the world but more profoundly on their "tacit epistemologies" and "even the nature of their cognitive processes" (Nisbett et al., 2001, p. 291). For example, they found that it is relatively more difficult for European Americans to detect changes in the background of scenes, suggesting that they are, in Berry's terms, less field dependent, whereas it is more difficult for Asians to detect changes within objects in the foreground of a scene, suggesting that they are more field dependent. In the East, the system of thinking is holistic, with attention to objects, events, and people in the field in which they are seen or known. Eastern thinking relies more on a dialectical style of reasoning. In the West, the system of thinking is analytic, with perceptual attention focused on the object or event and its categories, and understanding focused on properties and behavior, conceived of in terms of formal

rules. As mentioned above, Nisbett and his colleagues speculate that these different ways of thinking originated in markedly different social systems. The Western style can be traced, they suggest, to ancient Greece, whose geography placed it at the center of routes of trade, and which had a coastline facilitating transportation and a mountainous terrain that supported herding more than agriculture. In such a society, agency, and power were located in the individual. The Greeks passed down to Western cultures their emphasis on personal freedom and debate.

The ancient Chinese, in contrast, emphasized social obligation, collective agency, and harmony. Their civilization was based on agriculture, which required cooperation, and their society was complex and hierarchical. Their impressive technological innovations (including ink, porcelain, the compass, cartography, and seismographs) reflected, Nisbett proposed, practical ingenuity rather than scientific curiosity. Their worldview was one of overlapping or interpenetrating substances, in contrast to the Platonic worldview of essential forms underlying the apparent world.

Nisbett et al. (2001) proposed that not only is it possible to explain the intellectual differences between Chinese and Greek cultures through a reconstruction of their history, it is also possible to "build a psychological theory from the historical evidence" (p. 294). They suggest that what underlies habits of both attention (primarily to the field, on one hand, and primarily to the object, on the other) and cognition (explaining in terms of context or explaining in terms of essential properties) are forms of social organization. Dialectical and logical thinking may have developed to deal with conflict in different kinds of society. From this perspective, culture not only provides the contents of individuals' beliefs, it also offers the general-purpose cognitive tools which individuals employ.

Experimental evidence for this kind of general cultural effect on cognition includes the finding that when an object is taken out of its original context, European Americans have relatively little difficulty identifying it as familiar, whether it is presented in isolation or with a new background, whereas Asians have greater difficulty identifying the object as the same when it is presented with a novel background than when it is presented in isolation (Ji, Peng, & Nisbett, 2000; Masuda & Nisbett, 2001). Other researchers (making no mention of the demographic make-up of their sample) have suggested there is a universal bias toward processing objects in the foreground in human perception and categorization, but that semantic congruency between objects in the foreground and background increases accuracy (Davenport & Potter, 2004). Nisbett and colleagues suggested that Asians do not fail to process the object in the foreground, they incorporate the spatial context and somehow bind it into their representation of the object.

A similar phenomenon is "change blindness," in which people fail to notice large changes in a visual scene that are made while it is briefly hidden or during an eye movement.

Simons and Levin (1997) demonstrated that Asians more accurately detect changes to the background or environment, while European Americans more accurately detect changes to objects in the foreground. These findings may reflect the way cultures foster different patterns of attention by encouraging their members to incorporate more or less contextual information in decision-making processes (Ji et al., 2000; Masuda & Nisbett, 2006). More specifically, it has been proposed that Asians focus attention on the interrelations between objects and the contexts in which these are embedded in visual space, whereas European Americans attend primarily to the object in the foreground and its salient characteristics.

Researchers have found that patterns in eye movements correlate with observed differences in cognitive style (Chua, Boland, & Nisbett, 2005). The eye movements of American (the ethnic make-up of this sample was not specified) and Chinese participants were measured using eye-tracking equipment while participants viewed photographs of a focal object superimposed on a complex background. The American participants fixated more often on focal objects and tended to fixate more rapidly after initial presentation of the photograph. In comparison, the Chinese participants made more eye movements to the background and took longer to direct their gaze specifically toward the focal object.

Linking these findings to their biological substrate, an investigation using functional magnetic resonance imaging (fMRI) of the brain (which measures changes in blood flow related to neural activity) during a visual learning task that required repetitive memorization and active recall of abstract geometric patterns (Grön, Schul, Bretschneider, Wunderlich, & Riepe, 2003) found that although behavioral performance (i.e., total recall and slope of learning) was identical for Europeans (Germans) and Chinese, the two groups demonstrated different patterns of neuronal activation. Initial learning for the Chinese participants activated bilateral frontal and parietal areas. The frontal lobes and the parietal area above and behind them form what is known as the "dorsal stream," the "where" system, which is involved in guiding actions and recognizing where objects are in space. For the European American participants, in contrast, learning recruited what is known as the "ventral stream," posterior ventral regions, such as the fusiform gyrus and the hippocampal complex. These areas are associated with object identification and form the "what" system. The authors interpreted these results as demonstrating that differences in cultural upbringing influenced the initial attentional style with which the participants approached the geometrical patterns.

Such findings echo the earlier studies on differential levels of perceptual field dependence. It would seem that cultural differences in cognition *can* be observed in both behavioral performance and cerebral physiological activity. But, surprisingly and importantly, in the fMRI study a crossover effect was observed in which Europeans for a time exhibited dorsal activation (upper brain areas) and Chinese participants for a time exhibited ventral activation (lower brain areas), before both returned to their initial baseline pattern. This shift in processing strategy midway through the learning process may be an attempt to more fully consolidate the percept to be learned by engaging the complementary analyzer. Once the representation of the figure had been stabilized in long-term memory, participants returned

to their default attentional style. The fact that both European and Chinese groups were able to recruit both the ventral and dorsal streams suggests a significant degree of flexibility in the impact that their culture has had on their processing of visual information. That is to say, it is not the case that members of the more individualist culture *always* engage the ventral stream while members of the more collectivist culture *always* engage the dorsal stream.

#### Cognitive style as primed mind set

This finding of flexibility in the cognitive neuroscience literature is important because it raises questions about theories that assume a direct connection from social organization to cognitive processes via generalized, culturally organized systems of thought. Moreover, a series of studies using an experimental technique known as "priming" has clearly shown that cultural style alone cannot fully explain the dynamic nature of differences between or within cultural groups.

Priming is the process of making something ready. For example, in past times one primed a pump by pouring a little water into it to seal the moving parts and make it ready to operate. In the same way, one paints a layer of "primer" first, to seal the surface before applying the final coat of paint. In psychological research, priming is "preparing the mind" of the research subjects for the task they are to undertake. For example, when a subject is asked for a word that begins with "tab," if they are first given a list of words that includes the word "table" they are more likely to respond with that word. Priming may be perceptual (showing an image) or conceptual (showing a meaningful stimulus).

The precise way that priming works is the topic of much debate, but that issue need not concern us here. What is important to the present discussion is that priming studies reveal variation within cultural groups in the degree to which people manifest the cognitive style assumed to be generally characteristic of the group. Priming studies offer researchers the opportunity to manipulate experimentally the factors that cross-cultural researchers typically employ only quasi-experimentally. That is to say, the researcher can systematically introduce, in the form of a prime, a factor assumed to play a role in producing cross-cultural differences in cognition. Cross-cultural comparison of people who grew up in different places with different cultural practices cannot separate the various aspects of these practices to see which is responsible for a measured difference in cognitive style. In priming studies, however, factors that seem likely to be important can be operationalized, assessed, and manipulated. Participants are typically primed by being presented a series of apparently unrelated tasks. Unknown to them, the first task is intended to prime them for subsequent tasks. By studying the "spillover" effect of the priming task on the focal task, manipulating it systematically, and comparing it with crossnational differences, researchers can test models of cultural influence on cognition (Oyserman & Lee, 2007).

With respect to the issue of pervasive cognitive styles, culture-priming tasks are designed to activate the elements of individualism or collectivism. Diverse primes

have been used. They include asking people to think about how they are different from (individualism) or similar to (collectivism) family and friends; circling singular (*I, me, myself* ...) or collective (*we, us, ourselves* ...) pronouns in a passage; unscrambling sentences; subliminal presentation of words or pictures; reading a short story; and using a language assumed to be individualistic (English) or a language assumed to be collectivist (Russian, Chinese, Nepalese).

In a series of experiments, Oyserman, Sorensen, Reber, and Chen (2009) demonstrated priming effects on visual memory, visual search, the Stroop color recognition task (reading aloud color names printed in different colors, such as the word "green" printed in blue ink), a dichotic listening task (different auditory stimuli presented to each ear), and a test of academic preparedness. The participants for these experiments were from Eastern (Hong Kong and Korea) and Western (Norway and the United States) countries, as well as from a variety of American racial and ethnic groups (African Americans, Asian Americans and European Americans). Participants received instructions in their native language and were primed with a pronoun circling task. The results demonstrated that priming effects were similar in Eastern and Western societies (rather than it being the case that, for example, Westerners can be primed but not Easterners). They showed that the prime had an effect no matter what language was used. They also showed effects on a variety of kinds of cognitive tasks, including a real-world academic test. This included finding that once a cognitive style has been primed, it "will be used even when it is ill suited to the task at hand" (Oyserman et al., 2009, p. 223). This last finding has important implications for performance on academic tests and tasks by different racial and ethnic groups. A meta-analysis of 67 studies (Oyserman & Lee, 2007) also found that priming had a significant, though only moderate-sized, overall effect on various measures of cognition.

Oyserman et al. (2009) interpreted their findings as evidence for "the basic insight that how people think depends on the pragmatic imperatives of the context" (p. 230). They suggested that culture does not produce "fixed and largely immutable patterned ways of thinking and of organizing the social world" (p. 230), but rather presents its members with specific "pragmatic imperatives" (p. 230) which cue relevant mind-sets. The results of cross-national investigations probably reflect the fact that societies differ in the frequency with which they cue or prime their members. As Oyserman et al. put it,

Chronic between-society differences are likely importantly due to which mind-set is chronically accessible, suggesting that what appear to be fixed between-society differences are better understood as malleable differences in whether an individual or a collective mind-set is cued. (p. 230)

This work indicates that observable cross-cultural differences in cognition are not inherent in the people studied but are results of the cues that are generally provided to people by their culture. It takes us beyond static models which presume

that culture provides its members with enduring systems of thought by shaping persisting perceptual and cognitive habits, toward models in which culture presents moment to moment situations in people's practical activity.

#### Cognition in Cultural Practices

Cultural practices can be thought of as the proximal units of culturally organized experience (Cole & Packer, 2016). Shweder and his colleagues (1998) expressed this idea when they wrote that whatever universal cognitive characteristics humans share as a species, these features "only gain character, substance, definition and motivational force ... when they are translated and transformed into, and through, the concrete actualities of some particular practice, activity setting, or way of life" (p. 871). Culturally organized practices vary greatly within and between social groups, and so provide rich opportunities to study the relation of culture and cognition.

Authors who emphasize the idea of cognitive styles associated with the cultural patterns characteristic of large populations also assert the importance of cultural practice (Berry, 2015). So, for example, Nisbett and Masuda (2003) argued that "the differences in attention, perception, and cognition that we have shown are driven by differences in social structure and social practices" (p. 11169). Elsewhere, Nisbett and Norenzayan (2002) noted that "Societies differ in the cultural practices that they promote, affording differential expertise in the use of a cognitive strategy, or differential knowledge about a domain" (p. 28). However, these authors did not directly study cultural practices; instead their experimental studies investigated the presumed generalized cognitive outcomes of cultural practices which others had described.

By contrast, those who do directly study cultural practices as the proximal locus of culture-cognition relations are likely to combine direct ethnographic descriptions with experimental methods that model the practice they observe (Cole & Packer, 2016; Greenfield, 2004, 2016; Mejia-Arauz, Rogoff, & Paradise, 2005). The existing literature on culture and cognition provides many instructive examples. An early and compelling example can be found in the work of Serpell (1979). Having studied in Scotland but working at the time in Zambia in southern Africa, Serpell had become suspicious of a body of literature purporting to show that non-literate peoples were deficient in their ability to represent objects, due to a failure to develop appropriate habits of perceptual analysis. He conducted a study designed to distinguish between a generalized deficit in perceptual ability and culture-specific practices that promoted particular forms of representation. Four perceptual tasks were involved. The first required children to copy the positions of the experimenter's hands; the second to copy two-dimensional figures with pen and paper (drawing); the third to construct copies of two-dimensional wire objects with strips of wire; and the fourth to make copies of three-dimensional objects in clay.

Serpell's observations had led him to believe that there were cultural differences in the frequency with which the children engaged in the practices required for these tasks. He predicted that Scottish and Zambian children would perform equally well in mimicking hand positions, because such actions were observed in both cultural groups. Children in both groups had experience modeling in clay, so no differences were expected for that task. But differences were expected in the use of pen and paper to represent a two-dimensional object, which was a frequent practice for the Scottish children, but not the Zambian children. Precisely the opposite expectation held for modeling using wire, which was a common practice among the Zambian children but not the Scottish children.

As one would predict if one believed that cultural practices are intimately related to cognitive processes, there were no differences among the two groups for mimicking hand positions or modeling with clay. But the Scottish children outperformed the Zambian children when asked to draw a picture of a two-dimensional object, while the Zambian children outperformed the Scottish children in modeling using wire.

Studies of the relation between cognitive processes and culture can also be carried out within a single culture, using the differential experience of adults in local practices as a means for making the relevant contrasts. For example, Saxe and Gearhart (1990) studied the development of topological concepts in 5- to 15-yearold unschooled child weavers (who made mats, hats, and other objects from straw) in rural communities in northeastern Brazil. Topology is the branch of mathematics that deals with spatial properties that are unchanged by transformations such as stretching, twisting, and bending. Saxe and Gearhart observed and videotaped everyday teaching interactions and analyzed the child weavers' topological understandings, contrasting weavers of different age levels and comparing weavers with age-matched non-weavers. The children who had become expert weavers presented more topological information (what goes on top of what, how straws are interlaced, etc.). Weavers showed greater skill with increasing age and were more able to construct relevant patterns for inexperienced weavers than could age-matched non-weavers. They were also more likely to provide novice weavers with effective demonstrations of weaving actions.

Another research strategy that adds to our understanding of culture-cognition relations takes advantage of historical change. For example, Greenfield and Childs (1977) went to a Mayan community in the state of Chiapas, Mexico, where they studied the cognitive and social consequences of learning to weave. Their work included careful descriptions of the weaving process engaged in by women and young girls who were being apprenticed into weaving. They analyzed the patterns of the weaving products and conducted experimental tests of the children's ability to reproduce weaving patterns using sticks of varying width and color and a model of the traditional loom. In the 1990s, they returned to the same village and conducted parallel observations of parents (former child subjects) inducting their children into weaving to study the consequences of the changed weaving practices

and products that had taken place over the years (Garcia, Greenfield, Montiel-Acevedo, Vidaña-Rivera, & Colorado, 2017). In contrast to the late 1960s, by the mid-1990s, this Mayan community had shifted from an economy based primarily on subsistence agriculture, relatively secluded from the modern state, to one based heavily on involvement in the money economy, and with much more frequent interaction with people from outside the village and the local region, including trade in woven cloth in a profusion of new patterns. The instructional mode that characterized the mother-child weaving sessions in the 1960s and 1970s consisted of mothers hovering close by and guiding the children with their own hands and bodies, using little verbal instruction. The entire system appeared to focus on maintenance of the "one right way" of the weaving tradition, a limited, relatively simple set of weaving patterns. In the 1990s, mothers who were more involved in the modern economy (for example, women who wove products for sale) instructed their children verbally from a distance, sometimes relying on older siblings to take over instruction, and their children learned by a process with a good deal more trial-and-error and self-correction of errors. There was no longer a small set of simple, "correct" patterns but many, varied patterns, indicating the increased respect paid to individual innovation which comes with a trial-and-error approach to learning. This proliferation in turn depended on, and contributed to, changes in weaving practices.

Accompanying these historical changes in economic practices and the complexity of woven products were changes in the way children represented weaving patterns in the experimental task. For example, instead of using three white sticks to represent a broad band of white cloth, a single broad, white stick was now more likely to be used, and those who attended school were more likely to be able to create novel patterns. These historical changes were accompanied by an unchanging pattern of representational development related to age: older children in both historical periods were more able than younger children to represent more complex visual patterns, a fact that Greenfield (2004) interpreted as an indication of universal developmental processes accompanying culturally contingent ones.

Under some conditions, research focused directly on adults can be a strategy for those who are interested in the psychological consequences of cultural practices. Scribner and Cole (1981) adopted this approach in their study of the cognition and literacy among the Vai, a tribal group residing along the northwest coast of Liberia. Although standard ethnographies of the Vai made them appear to be similar in most respects to their neighbors, they were in fact remarkable because they had been using a writing system of their own invention, acquired entirely outside of schools, for more than 100 years.

The key part of Cole and Scriber's work involved the study of a variety of everyday tasks where literate people used written Vai to carry out culturally valued activities. From analysis of a large corpus of letters, for example, they discovered that although the contents were likely to be relatively routine, and hence easy to

interpret, the letters nonetheless contained various "context setting" devices to take account of the fact that the reader was not in face-to-face contact with the writer. They reasoned that extended practice in letter writing to people in other locales ought to promote a tendency to provide fuller descriptions of local events. This notion was tested by creating a simple board game, similar to games common in the area but different enough to require rather explicit instructions. Literate and non-literate Vai people learned the game and then described it, either to another person, face to face, or by dictating a letter to someone in another village in enough detail for that person to be able to play the game on the basis of the instructions alone. Vai literates were far better at this task than non-literates, and among Vai literates their degree of experience in reading and writing was positively associated with performance.

Vai literates also excelled at analyzing spoken words into syllables and at synthesizing syllables into meaningful words and phrases, for example, the words for chicken (tiye) and paddle (laa), when combined, yield the word waterside, so by combining pictures it was possible to make entire "sentences." The same kind of result was found when tasks were modeled on Qur'anic literacy practices, wherein children learned to recite the Qur'an, the Islamic sacred book, by adding one word at a time to the first word of a passage. In an "incremental recall" task in which lists of words are built up by starting with a list length of one item and adding one item per trial, Qur'anic literates excelled. By contrast, when the order of the items changed from trial to trial (free recall) school literates performed better than Qur'anic literates.

Another example of cross-cultural research that focuses on the level of cultural practice is work carried out by Rogoff and colleagues, examining the proclivity of children from many low-technology cultures to learn by carefully observing what their peers and elders are doing, which they call Learning by Observing and Pitching In (LOPI). Rogoff, Paradise, Mejia-Arauz, Correa-Chávez, and Angelillo (2003) arranged for 6- to 8-year-old children to observe a 10-year-old child being instructed by a bilingual experimenter in how to accomplish an origami paperfolding task (Mejia-Arauz et al., 2005). The children were either from Mexican heritage or European American heritage homes, living in a coastal town in California. Only half of the Mexican-heritage children had mothers with more than a high school education, while all of the European American heritage children had mothers with more than this level of education. On the basis of evidence from many nonindustrial and indigenous societies, Mexican-heritage children were expected to observe more intently and ask for fewer explanations than their European-heritage counterparts. And this is what they found—for the Mexican-heritage children whose mothers had attained lower levels of education. However, those Mexican heritage children whose mothers had gone beyond high school behaved more like their European American counterparts than their peers. They did not engage in as much intent observation, and they asked for a good

deal more verbal explanation. These results led Mejia-Arauz and her colleagues (2005) to conclude that:

Participation in school may socialize specific practices that then gradually become part of indigenous and indigenous-heritage people's own ways of doing things when former schoolchildren become parents, supplanting a traditional emphasis on learning by observation. (p. 290)

A final example of how cognitive skills develop when a society creates artifacts and cultural practices to support more complex cognitive achievements comes from studies of involvement in the use of an abacus in Japan (Hatano, 1997). An abacus, which consists of an oblong frame with rows of wires along which beads are slid to perform calculations, is an external memory and computational device. It registers a number as a configuration of beads, and operations of addition, subtraction, multiplication, and division are carried out by moving them. People can learn how to operate an abacus in an elementary but serviceable manner in a few hours when they participate in deliberate instruction. Advanced training is geared almost entirely to accelerating the speed of the operations involved. Values respecting the speed of calculation are shared among abacus operators.

As a result of extensive training, abacus operation tends to be gradually interiorized to such a degree that most abacus masters can calculate accurately and even faster without a physical abacus present than with the instrument itself. During mental calculation, it appears that they can represent an intermediate, resultant number on their "mental abacus," in the form of a mental image of the configuration of beads, onto which (mentally) they enter, or from which they remove, the next input number. In other words, abacus experts can solve calculation problems by mentally manipulating the mental representation of abacus beads. The interiorization of the operation is an important mechanism for accelerating the speed of calculation, because the mental operation is not constrained by the speed of muscle movement. Thus, expert abacus operators use the real abacus only when they calculate very large numbers that cannot be represented on their mental abacus. Abacus operators calculate extraordinarily rapidly (Hatano, 1997); when mixed addition and subtraction problems are presented in print, experts manipulate 5-10 digits per second. Remarkable speed is also observed for multiplication and division.

The case of gaining expertise in abacus operation (both material and mental) exemplifies the sociocultural nature of expertise (Hatano, 1997). Pupils who attend abacus classes are usually sent by their parents while they attend elementary school. The parents often believe that the exercise will foster children's diligence and punctiliousness as well as enhance their calculation and estimation ability. Young pupils are motivated to learn abacus skills to get parental praise, especially by passing an exam for qualification.

The students' motivation changes when they join an abacus club at school or become a representative of the abacus school—in other words, when the operation is embedded in a different kind of practice. Abacus enthusiasts compete in matches and tournaments, as tennis or chess players do. Also, like these players, abacus club members not only engage in exercise at least a few hours every day but also seek knowledge of how to improve their skills. Their learning is strongly supported by the immediate social context of the club and the larger community of abacus operators.

Abacus operators are also socialized in terms of their values, for example, regarding the importance of abacus skills and their status in general education, as well as their respect for the speed of calculation mentioned above. In fact, the community of abacus educators and players constitutes a strong pressure group in the world of education in Japan. In this sense, gaining expertise is far from purely cognitive. It is a social process (Lave & Wenger, 1991), and it involves changes in values and identities (Goodnow, 1990). The experts' values and identities are undoubtedly forms of "culture in mind," acquired through internalization. They serve as the source of motivation for experts to excel in the target domain.

Expertise in mental abacus operation also induces changes at neural levels. For example, using event-related fMRI (high-speed mapping which makes it possible to study cerebral reactions to individual stimulus events), Tanaka, Michimata, Kaminaga, Honda, and Sadato (2002) showed that whereas ordinary people retain a series of digits in verbal working memory (showing increased activation in the corresponding cortical areas including Broca's area, long associated with language), mental abacus experts hold them in visuospatial working memory, and show activations in bilateral superior frontal sulcus and superior parietal lobule, areas involved with spatial working memory and somatic perception respectively. Wang and his colleagues (Wang et al., 2017) have demonstrated that extensive abacus training among elementary school children aimed to increase calculation ability improves children's executive functions to enhance the neural efficiency of the frontoparietal regions.

#### Conclusion

These are only bare outlines of contemporary approaches to culture and cognitive development. It now is well established that culture is more than an "add on" to a phylogenetically determined process of human cognition. Culture matters. In Geertz's (1973) terms, it is "ingredient to the process" of cognitive development because the biological and cultural heritages of human beings have been part of the same process of hominization over millions of years. Claims for this interdependence are bolstered by modern brain imaging techniques that amply

demonstrate that culturally organized experiences, whether organized at the level of societies as a whole or at the level of cultural practices, have clear influences on brain organization and functioning and vice versa.

An issue that requires a good deal more thought concerns the connections among universal cultural processes, cognitive styles, and cultural practices. On this point, there is as yet no firm agreement among scholars. Many adhere to the notion that broad cognitive styles, although acquired in specific cultural practices, are based on society-wide, historically accumulated, designs for living so that it makes good sense to speak of East Asian versus European or American cognitive styles that shape human cognition in virtually all domains of human experience from conceptions of the self to forms of perception, attention, problem solving, and social interaction. Even some who focus on cultural practices as the proximal locus of cultural influences on cognition believe that such practices are significantly shaped by overall cultural patterns that can be contrasted in terms of overarching binary oppositions such as interdependent versus independent cultural/cognitive styles.

However, as we have shown, others place more emphasis on cultural practices as the primary locus of cultural variations in cognitive development and take the view that the degree to which patterns of behavior learned in specific cultural practices become general in a cultural group is the result of the culturally organized linkages between practices which are never totalizing in their effects. Thus, for example, the range of literacy practices among the Vai is restricted relative to the range of practices associated with literacy in technologically advanced societies. The reasons for this restricted range among the Vai are many: absence of a technology of mass production, legal restrictions placed by the central government on the use of Vai script in civil affairs, adherence to a religion that uses a completely different writing system and a foreign language, and so on. Scribner and Cole's activity-based, cultural practice approach emphasized that, if the uses of writing are few, the skill development they induce will also be limited to accomplishing a narrow range of tasks in a correspondingly narrow range of activities and content domains.

However, when technological, social, and economic conditions create many activities where reading and writing are instrumental, the range of literacy skills can be expected to broaden and increase in complexity. In any society where literacy practices are ubiquitous and complexly interrelated, the associated cognitive skills will also become more widespread and complexly related, giving the (false) impression that literacy (usually attributed to engagement in schooling) induces generalized changes in cognitive development.

The literature on priming, although it has been carried out within the research tradition that gave rise to the idea of cultural styles, appears to be moving toward a similar conclusion from the opposite direction (e.g., Hong & Mallorie, 2004; Hong, Morris, Chiu, & Benet-Martínez, 2000). When Oyserman and her colleagues (2009) examined the proposal that there are cross-national differences in cognitive

"mind-sets" (styles), they came to the conclusion from their priming studies that culture is situated cognition. In their view, general processes such as perceiving meaningful wholes or analyzing wholes in terms of their constituents are universal cognitive abilities, but whether people focus first on the whole or on its constituents depends upon the range of cultural practices which evoke one or the other cognitive strategy. As a result, particular cognitive strategies (mind-sets) "may appear stable within a particular context," but are in fact "malleable and sensitive" to subtle changes in the setting (p. 230). What Oyserman and her colleagues referred to as "small interventions" (p. 233) that can evoke such changes include all of the experimental procedures that psychologists use to ground their inferences concerning culture-cognition relations.

This line of thinking is strikingly similar to the conclusion of Cole, Gay, Glick, and Sharp (1971) almost 50 years ago that "cultural differences in cognition reside more in the situations in which particular cognitive processes are applied than in the existence of a process in one cultural group and its absence in another" (p. 233, original emphasis).

Rogoff and her colleagues' research on the difference between Mexicanheritage and European American-heritage children's proclivity to learn through intent observation is further evidence for this general line of thinking, for it implies that formal, literacy-based schooling is usefully considered as a complex set of cultural practices. Involvement in those practices induces practice-specific learning, but it may also seep into practices of the home and community. Hence, children's proclivities to engage in learning through intent observation change not because of a society-wide difference in cognitive style that shapes their involvement in specific practices (folding paper to make objects) but because of the interconnection of home and school practices in the lives of their parents, whose own lives were changed by the practices they engaged in as youngsters. As Rogoff and Angelillo (2002) described their approach, their aim is to examine a pattern of approaches to learning that relates to a constellation of cultural practices. This approach to culture, focusing on multifaceted and coherent cultural practices rather than on variables "independent" of each other, allows examination of cultural patterns that would be obscured if all but a few differences between communities were "controlled" (p. 290).

Running through most of the psychological research on culture and cognition is the assumption that the former has a causal and unidirectional influence on the latter. We have suggested that instead the relationship should be seen as one of *constitution*. Culture and cognition are not two separate phenomena: culture makes cognitive phenomena possible; humans cannot think except through culture. At the same time, culture is impossible without human thought and action. Neither would exist without the other. Of course, biology cannot be left out, but biology alone is not sufficient, for humans have evolved to live cooperatively together and we raise our children in complex environments filled with the cultural artifacts we use to work and play. As children use these artifacts in interaction

with significant other people, their psychological functioning is transformed. In this sense, culture is the medium in which children grow.

The task that faces psychologists is that of untangling and articulating the character of this mutual constitution. Cross-cultural research plays an important part in this task, but the typical cross-cultural research design, in which the comparison of two or more cultures is treated as a quasi-experimental design, cannot avoid treating culture as a variable. Even experimental studies, such as the priming research, treat cultural factors as distinct from cognition, having an influence *on* it but not being inherent *to* it.

The relationship between cognition and culture, then, is that of parts in an interrelated whole. Psychology still lacks the methodology adequate to the investigation of complex, holistic systems, but the way humans live, perceive, and think in cultural settings is surely one such system. Earlier we introduced Luria's concept of a kinetic melody as an illustration of the interpenetration of the cultural and the neural, and as a unit of analysis that captures something of the dynamic, interwoven character of human life and suggests how we might transcend the reductionism of much experimental design. The studies we described briefly in the final section of this chapter illustrate how cultural psychologists have begun to develop ways to investigate and understand the ecological complexity of human experience, and the part in this that is played by cognitive functioning. But there is still a long way to go before we can claim a firm understanding of the intricate ways in which culture and cognitive development relate to each other.

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# Conceptions and Approaches to Education Across Cultures

Ji-Yeon O. Jo and Jungmin Kwon

#### **Conceptualizing Cross-Cultural Education**

Cross-cultural education has been studied from various perspectives and approaches and manifests in multiple forms. The varying approaches to the studies and practices of cross-cultural education depend on the varying emphases between the two words—*culture* and *education*; that is, whether to emphasize the role of *culture* in education or the role of *education* in cultural understanding.

For example, studies that focus on the crucial role of *culture* in education explore different learning styles of students from diverse cultural groups. These studies highlight the influence of a person's cultural background on his/her cognitive processes that affect learning, such as categorization, learning and memory, schooling and literacy, spatial cognition, problem solving, verbal reasoning, and creativity (Mishra, 2001). Molitor and Hsu (2011) also argued that culture influences students' attention and autobiographical memory; thus, different cultural backgrounds of students can influence their learning process and, potentially, outcomes differently.

Other studies of cross-cultural education that focus on *culture* in education consist of comparative studies on educational practices in different cultures (e.g., British education, Chinese education, Mexican education). These studies have enhanced comparative understanding of educational practices across cultures; however, they tend to equate cultural boundaries with nation-state boundaries and overlook diversity within the seemingly disparate units of nation-states.

On the other hand, studies of cross-cultural education that look into the important role of *education* in cultural understanding focus on educational

environment, programs, practices, and policies to enhance students' understanding of diverse cultures. These studies are concerned with teaching about diverse cultures. In this case, however, the location of the culture is important—whether the culture is located outside the nation-state or within the nation-state where the education is in process. In the United States, for example, cross-cultural education may mean learning about European, Asian, or African cultures if the location of culture is positioned outside the U.S. This approach is commonly known as international education or global education. Another approach to cross-cultural education places the location of culture within a society or nation-state. This approach is commonly known as multicultural education or diversity education.

As we have delineated, cross-cultural education manifests in many different forms; thus, defining and conceptualizing cross-cultural education are very challenging. With this challenge in mind, we utilize a working concept of cross-cultural education that "involves educating a combination of diverse cultures that surrounds a student's environment and of the world" to further its conceptualization. Its goal is to prepare students to acquire cross-cultural competence, which is "a set of attitudes, knowledge, and practices that enable individuals and institutions to function effectively in cross-cultural situations" (Park, 2012, p. 500). Cross-cultural competence has been interchangeably used with other terms such as intercultural sensitivity, cross-cultural awareness, intercultural competence, and cultural proficiency (Deardorff, 2011; Park, 2012). These concepts are similar in the sense that the emphasis is put on fostering students' abilities to perform efficiently and appropriately when interacting with others who are linguistically and culturally different from themselves (Fantini, 2006). Based on the conceptual understanding of crosscultural education explored in this section, we examine how cross-cultural education manifests and is practiced in the contexts of K-12 and higher education in the United States in the following section. We conclude this chapter by suggesting prospects for cross-cultural education in parts of the world that experience increasing transnational flow of and interaction among cultures.

## Cross-Cultural Education in K-12 Education in the United States

Fostering the cross-cultural understanding of K-12 students is increasingly relevant in today's educational landscape, which is rapidly becoming more linguistically and culturally diverse than ever. For instance, in the United States, a rapid increase in the number of immigrants has contributed to increasing diversity in classrooms and society. This change creates an immediate need to educate students to have knowledge, skills, and abilities to interact and communicate with individuals from

other cultural backgrounds. Moreover, globalization and the advance of technology have enabled students to gain more opportunities to interact with people around the globe through travel, study abroad, and online exchange. Hence, understanding similarities and differences between/among cultures not only prepares students to work effectively with diverse groups of races, ethnicities, languages, and cultures, but also allows them to increase academic success and prepare for a globalized society (Keengwe, 2010; Smith, 2004).

However, in many cases, students in the K-12 curriculum are exposed to other cultures at a superficial level where they merely acquire knowledge of what people from other cultures eat and how they dress and celebrate (DeCapua, 2008). Such instruction does not help students understand the deeper meanings of cultures and build cross-cultural understanding, but instead may create stereotypes and biased views toward others. Therefore, scholars and educators have pointed out the necessity of cross-cultural education and its potential as an avenue for educating students in a diverse classroom and society. Education across cultures is an urgent need in the field of education when considering discrepancies in educational attainment and achievement among a diverse group of students, which may signal the possibility of inequity in education along lines of cultural diversity.

#### Approaches to Cross-Cultural Education

The concept of cross-cultural competence has been emphasized not only in education but also in various other areas, including health care, social services, and counseling, due to globalization and the growth of diversity in society. In the field of education, scholars and practitioners aspire to develop students' cross-cultural competence to enable students to interact and live comfortably with individuals from different linguistic and cultural backgrounds and to understand diverse cultures. Cross-cultural education is based on the belief that all cultures have important values, and that understanding of differences among cultures, individuals, and groups is valuable to classrooms and society. Until the 1970s, educators often viewed cultural differences as negative factors that needed to be minimized or erased. During that time, deficit approaches to teaching and learning were prevalent (Paris, 2012). However, since the 1990s, scholars, educators, and practitioners have come to recognize cultural differences as instructional assets and strengths that need to be accepted, valued, and celebrated in society (Lynch, 2011; Park, 2012). Cross-cultural education focuses on exploring, respecting, and teaching differences in culture, race, class, and gender, fostering cross-cultural understanding of K-12 students. Rather than seeing cultural differences as a deficit to overcome, this perspective views them as "useful resources, which can be used to design instruction" (Rueda & Stillman, 2012, p. 248).

Another characteristic that many cross-cultural education programs share is an understanding of self and others (Acer, 2012; Damen, 1987). Damen (1987) explained:

Cross-cultural awareness involves uncovering and understanding one's own culturally conditioned behavior and thinking, as well as the patterns of others. Thus, the process involves not only perceiving the similarities and differences in other cultures but also recognizing the givens of the native culture. (p. 141)

Moreover, cross-cultural education emphasizes integration rather than assimilation. The term assimilation assumes that individuals from non-dominant groups need to give up their own cultures and cultural identity to gain the worldview of the host and a dominant culture (Bennett, 2004). Bennett (2004) suggested that guiding students from ethnocentric orientations to ethnorelative orientations is one of the critical components of cross-cultural education. According to Bennett, students who have ethnocentric orientations believe that their own culture is the only reality. These students do not notice other cultures, show disinterest in other cultures, or deny confronting cultural differences. They may go through such stages as denial, defense, and minimization. Bennett explained that the ethnorelative approach is essential, and includes stages such as acceptance, adaptation, and integration. Students who have ethnorelative views may experience their cultures in the context of others and appreciate cultural differences. Educators have employed various programs of cross-cultural education in the attempt to achieve this end.

#### Experiential education

Developing cross-cultural understanding is not a set of simple tasks, but a lifelong process. The learning process requires students and educators to have "a flexible mind, an open heart, and a willingness to accept alternative perspectives" (Lynch, 2011, p. 42). Cross-cultural understanding can be acquired through information, socializing with individuals from diverse cultural backgrounds, immersion into other cultures, and learning the languages of other cultures in and out of school settings (Lynch, 2011). In these processes, students can engage in experimentation, reflection, thinking, and exercises (DeCapua, 2008; Kolb, 1984). One of the primary approaches to cross-cultural education is through experiential learning, where students visit or live in a culture other than their own. In these contexts, students can be naturally exposed to the experiences of developing a sense of respect, appreciation, and understanding of other cultures.

Another example is cross-cultural training in which students can gain hands-on experiences developing cultural awareness (DeCapua, 2008). In a study of middle school students, DeCapua demonstrated that short-term cross-cultural awareness training, in an experiential learning program, enhanced the students' understanding of cultures and positive attitudes about cultural differences. Based on this research, she argued that longer-term cross-cultural training programs can be significant contributors to efforts to prepare students at the middle and high school level for cultural interactions and awareness.

#### Migrant education

A common area for implementation of cross-cultural education is migrant education. Considering the increase in the number of migrant populations and their transnational movement, enhancement of cross-cultural understanding of students from both migrant and non-migrant households is vital. However, there is a widespread assumption that migrants permanently leave their home countries and settle in host countries. This assumption creates the belief that cross-cultural education is needed to facilitate the migrant population adjustment, socially and culturally, in the host country. Thus, many existing educational programs are designed to focus on the language and culture of the host country to help migrants settle in.

However, unlike in the past, contemporary migrant students are more likely to move across geographic boundaries, due to easier access to technology and travel. These students develop multifaceted identities and feel a sense of belonging to multiple countries and contexts while contributing to the linguistic and cultural diversity present in classrooms. Moreover, each student has unique learning needs prompted by transnational experiences and identities that are "hybrid, complex, multifaceted and constantly changing or blurring" (Cantalano, 2016, p. 195). Therefore, it is crucial for teachers not only to recognize the diverse backgrounds and learning needs of each student, but also to take into account students' connections to multiple environments at local and global levels.

The curriculum model that Bajaj and Bartlett (2017) suggested, a critical transnational curriculum, is a new direction for recognition of transnational lives and trajectories of migrant students. They argued that the K-12 curriculum should use diversity as a learning opportunity, engage translanguaging, promote civic engagement, and cultivate multidirectional aspirations. Such a new direction, which advocates integration of migrant students, can foster cross-cultural competence that is adequate and relevant to the globalizing world.

#### Cross-cultural education for all

Cultural differences not only enrich classroom environments, but also help all learners increase their academic success. Therefore, cross-cultural education, which aims to build skills and an understanding of cultural differences, needs to be implemented not just for a minority, but for all. However, there is a prevalent assumption that cross-cultural education is for minoritized students such as migrants, English learners, and racial and ethnic minorities.

Cross-cultural education is often dealt with in classes in specific content areas such as geography, history, or language. Many educators practice a cultural tourism or "tour or detour" approach (Abdullah, 2009), where students learn about such things as another culture's foods and festivals. This approach hinders an in-depth understanding of cultural differences, instead focusing on superficial and simple knowledge of other cultures. Instead, educators must make an effort to integrate cross-cultural components in all aspects of curriculum and instruction.

To achieve such integration, educators must utilize the diverse languages and cultures that children bring into the classroom. Moll, Amanti, Neff, and Gonzalez (1992) have acknowledged these significant assets as funds of knowledge that can be used in the classroom to engage students in learning. This approach sees diversity and cultural differences as assets, and furthers the idea that teachers should practice pedagogy rooted in racial, cultural, and linguistic integration rather than assimilation.

# Promoting Cross-Cultural Understanding in K-12 Education

#### **Creating Learning Environments**

As Keengwe (2010) argued, it is vital that we create a classroom that recognizes "each student is a unique individual with unique characteristics that include strengths and challenges" (p. 198). To establish such culturally responsive learning environments that promote cross-cultural understanding, both teachers and students must acknowledge the different cultures that comprise diverse classrooms. Furthermore, teachers should have hands-on opportunities to develop cross-cultural competencies and to ensure that they perceive and value all students and their cultural backgrounds equally (McAllister & Irvine, 2000).

Moreover, it is imperative that teachers create an encouraging learning space where cultural differences can be discussed openly and respectfully (Lynch, 2011). Incorporating authentic reading materials such as multicultural children's literature can be an effective way to foster children's global awareness and cross-cultural understanding. Naqvi and Pfitscher (2011), for example, suggested using dual-language books, books that present a narrative in two languages and represent different cultures and languages, as a way to validate students' linguistic and cultural diversity. They also suggested engaging students in meaningful discussions around differences in individuals, languages, and cultures. Nkurumeh (2010), who emphasized art education as a way to increase cross-cultural understanding, explained that teachers should make classrooms pedagogical spaces where students can share their thoughts, feelings, and actions as a means to foster students' cross-cultural understanding.

# Connecting School and Community

To promote a cross-cultural understanding of students, teachers and schools need to recognize the importance of connecting school and community as well as considering multiple alternative learning spaces. As Banks (1998) pointed out, it is vital that teachers acquire knowledge of and understand the perspectives of the

communities and surroundings in which they teach. Discovering students' ample cultural and linguistic resources embedded in out-of-school settings can help teachers better develop curriculum and instruction to meet the diverse needs of students (Moll et al., 1992). Furthermore, scholars have pointed out the necessity of considering alternative learning spaces such as after-school programs (Campano, 2007; Orellana, 2016), homes (Li, 2006), the community, and digital media (Jiménez, Smith, & Teague, 2009; Lam & Rosario-Ramos, 2009). These spaces help educators understand complex and dynamic linguistic and cultural knowledge that students develop outside of schools and how this knowledge can be used as a resource in cross-cultural education.

# Cross-Cultural Education in Higher Education in the United States

The National Education Association (NEA) argued that "global competence is a 21st century imperative" by highlighting the interdependent economy, increasingly diverse U.S. society, complex global challenges, and the benefit of global competence to students' overall achievements (National Education Association, 2010, p. 1). The NEA defined global competence as

the acquisition of in-depth knowledge and understanding of international issues, an appreciation of and ability to learn and work with people from diverse linguistic and cultural backgrounds, proficiency in a foreign language, and skills to function productively in an interdependent world community. (National Education Association, 2010, p. 1)

The importance of cross-cultural education to foster global competence of students has been widely recognized. According to Egginton and Alsup (2005), the American public is concerned about U.S. youths' lack of knowledge about the world around them and largely supports offering foreign language programs and international curriculum at higher education institutions to increase students' global competence. They define global competence as "universal sophisticated knowledge and understanding of far corners of our globe–its geography, its economic and ecologic interdependences, its often fragile political stability, its sometimes terrifying conflicts in religious beliefs and cultural practices, its many languages" (Egginton & Alsup, 2005, p. 53).

Comparing this definition of global competence to the definition of crosscultural competence that we introduced earlier in this chapter, we can see that global competence and cross-cultural competence are not much different in their conceptions and are used interchangeably. Although a growing number of universities have put forth internationalization of the university and fostering global

competence as their main missions (Stromquist, 2007). Egginton and Alsup (2005) also noted that the kind of global competence that they suggest has not received much attention from higher education. Despite this lack, higher education institutions currently offer various forms of cross-cultural education. The common approaches adopted by higher education institutions to increase global (cross-cultural) competence are delineated in the following section.

#### Approaches to Cross-Cultural Education in Higher Education

Major areas of study

Major areas of study that provide cross-cultural education include foreign language studies, ethnic studies, area studies, and international or global studies. Although students have opportunities to study foreign languages during U.S. K-12 education, the options for languages are generally quite limited to just a handful of languages such as Spanish, French, and German. Although a growing number of K-12 schools provide instruction in Chinese as a foreign language, the majority of languages offered are European. In higher education, too, European languages are dominant, although more options for foreign language studies are generally available, ranging from Arabic to Swahili. With a wide range of foreign language course offerings, especially the less commonly taught languages (LCTL), minority students who did not have the opportunity to learn their heritage languages during their K-12 education may, for the first time, be able to learn or advance their heritage language proficiency.

Ethnic studies departments or programs in higher education provide students opportunities to study various ethnic groups within and beyond the U.S. With increased transnational flow of people, the focus of race and ethnic studies in U.S. higher education institutions has moved away from studying mainly the U.S. context of racial and ethnic relationships and development to diasporic and transnational experiences of diverse ethnic groups. However, the number of universities that host ethnic studies departments or programs is very limited. A similarly limited number of universities also provides students opportunities to study racial and ethnic minority Americans in courses or programs such as African American Studies, Asian American Studies, and Latino/a American Studies.

Area studies programs provide in-depth studies of cultures and countries outside the U.S., such as Asian Studies, Romance Studies, and Slavic Studies. The focus of area studies, too, is moving away from nation-state-bounded area studies to transnational/transborder studies. Thus, the disciplinary gap between ethnic studies and area studies has narrowed in recent years as transnational area studies, transnational ethnic studies, or global studies have gained visibility in recent years. Transnational studies can bridge the gap between race/ethnic studies and area studies but these are not yet very well established on the majority of college campuses.

#### International education exchanges

Higher education institutions generally provide a more diverse array of study abroad or exchange programs than K-12 education institutions. University students can embark on a study abroad or on an exchange program to another country to study about the country or to learn the language spoken in the country. The U.S. government, universities, and non-profit institutions encourage university students to study abroad (Egginton & Alsup, 2005; USA Study Abroad, n. d.). Although the percentage of students who study abroad still remains very small at about 1.63% of the total student population and 10% of college graduates (Trends in U.S. Study Abroad), the total number of students who studied abroad in the 2008/2009 academic year was 260,327, a sharp increase from 154,168 in the 2001/2002 academic year (The Power of International Education, n. d.), and by 2015/2016 the number had grown to 325,339 (Trends in U.S. Study Abroad, n. d.).

Study abroad is an excellent venue for experiential learning that allows a student to learn about the culture and language while immersed in living in the country (Shiri, 2015). Students also have options for the duration of study abroad according to their own needs and availability, which could last for a couple of months over a summer or a semester, or an entire year. Existing studies have agreed that study abroad improves students' cross-cultural awareness, intercultural sensitivities, and global understanding (Anderson, Lawton, Rexeisen, & Hubbard, 2006; Kitsantas, 2004; Williams, 2005). For instance, Williams (2009) investigated how study abroad can develop students' intercultural competence, finding that study abroad experiences increased the students' open-mindedness, curiosity, and flexibility. It also helped the students enhance their understanding of international and cultural issues.

In higher education, the influence of study abroad programs occur in two ways: One way is to send the U.S. students overseas and another way is receiving foreign students into higher education institutions in the United States. The United States has been one of the most popular destinations for foreign study abroad students, and their presence has contributed to diversity within U.S. institutions and increased opportunities for cultural, educational, and social exchanges between U.S. students and foreign students.

#### Internationalization of universities: Global campuses and e-learning

An increasing number of European and American colleges and universities have established global campuses around the world, allowing them to bring their educational systems and infrastructure to students in other countries, especially in Asia and Latin America (Altback & Knight, 2007). In addition, higher education institutions in developed countries also reach out to their domestic and overseas educational "customers" through online courses without even establishing physical campuses. They reshape a select number of courses offered at their universities as free online courses via such vehicles as edX, MOOC (massive open online courses) or iTunes U, which can reach out to anyone who has internet access.

However, it is debatable whether the educational programs offered through online courses that cross the nation-state boundaries can be considered cross-cultural programs, because some of them teach only subject areas without integrating a cultural component.

#### Promoting Cross-Cultural Competence in Higher Education

To a certain degree, there are more resources and opportunities available in higher education to promote cross-cultural competence of students than in K-12 education. Furthermore, online sources such as YouTube clips posted from around the world, news broadcasts, other travel and cultural websites, and language learning websites can be more readily utilized for class activities and assignments in higher education. Institutions of higher education can reach out to diverse local communities and build partnerships with them to enhance cross-cultural understanding and competence of not only their own students but also members of the community. One of the challenges, however, that higher education faces is that many of its faculty are experts in their subject matter, but not necessarily trained to teach students with a diverse linguistic or cultural background or to develop curriculum that is culturally sensitive. Thus, it is imperative for higher education institutions to provide educational opportunities for faculty so that they are adequately equipped with cross-cultural competency and can be ready to teach and engage students in a culturally sensitive curriculum.

# Moving Forward: Challenges and Possibilities

In order to adequately prepare students for an increasingly globalized world, educational institutions, both K-12 education and higher education, have initiated and implemented various cross-cultural programs. However, cross-cultural education is not offered as one type of program. Depending on the emphasis, cross-cultural education manifests in a variety of programs such as experiential education, migrant education, and ESL/EFL education in K-12 institutions, and foreign language studies, area studies, ethnic studies, and study abroad programs in higher education. There are also inconsistencies between K-12 education and higher education regarding what they emphasize in cross-cultural education and how they provide educational programs.

While the major emphasis of cross-cultural education in K-12 education is teaching about diverse cultures in the U.S. and developing cross-cultural competence across different racial and ethnic groups in the country, K-12 institutions are also under scrutiny due to their assimilation-oriented approaches when educating culturally diverse students and their tendency to view students' diverse cultural

backgrounds as a hindrance to their cultural and linguistic adjustment in U.S. society. Thus, it is imperative for K-12 schools to recognize cultural differences as useful resources and to understand cross-cultural education is for all students, not just for minoritized students. At the K-12 levels, however, integration of cross-cultural education in regular curricula or in experiential education is still very limited.

Although institutions of higher education offer a variety of programs through major areas of study such as foreign languages, ethnic studies, and area studies which provide in-depth studies of diverse cultures, programs for minoritized students, especially for migrant students, lose visibility in higher education. Furthermore, the issue of diversity becomes complicated due to the presence of both U.S. minority students and international students who are culturally and linguistically diverse. The major beneficiaries of ESL/EFL education, when it is provided, are largely international students. Not enough universities have established ethnic studies or transnational studies programs for migrant populations—programs such as Asian American Studies and Latino/a American Studies.

Although there are noticeable inconsistencies in the approaches and practices of cross-cultural education between K-12 and higher education, there are also common challenges for implementing cross-cultural education at all levels of educational institutions.

# Challenge 1. Cross-Cultural Education for All Cultures

Educational institutions in the U.S. have implemented various types of educational practices to develop and enhance students' cultural understanding as well as to recognize the diverse cultural backgrounds of students. In cross-cultural education, teaching students about diverse cultures and learning about students' own cultures have to be implemented in tandem. In a similar vein, cross-cultural education should take both the outward modality and inward modality into consideration, an approach that requires learning about cultures outside one's own community or country, but also learning about heterogeneity, multiplicity, and hybridity (Lowe, 1996) within a particular boundary, such as religion, ethnicity, sexuality, and language. In addition, the importance of learning about the intersectionality and transnationality of and between cultures has become even more crucial in recent years as more and more people's everyday lives straddle multiple cultures.

One of the biggest challenges for cross-cultural education is the reality that there is so much to learn. Learning about "all" cultures is a humanly impossible task. No one can learn every aspect of diverse cultures, not even one's own, because culture itself is constantly changing. Thus, rather than focusing on the amount of cultural knowledge necessary to enhance cross-cultural competence (or global competence), it would be more practical and helpful to ponder fundamental

attitudes or practices toward cultural difference, so that even when students encounter people from unfamiliar cultures, they would interact with an honoring and respectful attitude.

## Challenge 2. Defining Competence

A common goal for cross-cultural education is to enhance the cross-cultural competence of students. At the beginning of this chapter, we introduced the definition of cross-cultural competence proposed by Park (2012, p. 500), which is "a set of attitudes, knowledge, and practices that enable individuals and institutions to function effectively in cross-cultural situations." With increased globalization of the economy and marketplace, the term "global competence" is used interchangeably with, or sometimes replaced by, the term "cross-cultural competence." However, the increased influence of neoliberal logic and late capitalism in education has shaped what competence entails. In contemporary cross-cultural education, competence seems to refer to competitive skills in the global market—skills that are transferable across borders.

Although true cross-cultural competence would require recognition of cultural differences and knowledge about different cultures as useful resources and assets in their own right, current understanding is largely based on neoliberal and capitalist views of resourcefulness and assets. Although it would be anachronistic and even unrealistic for universities not to consider the demand of the globalizing economy, it will also be extremely limiting for the potential of cross-cultural and global education if economic competency is the major focus. Cross-cultural education should aim for development of global justice and equity through understanding different cultures and building collaborative global communities.

# Challenge 3. The Limit of Tolerance

The importance of knowing other languages and cultures is often stressed in times of crisis. The surge of enrollment in Arabic language classes and Middle Eastern Studies after the 9/11 incident in 2001 is a prime example. When we talk about conflicts between cultures (e.g., languages, religions, ethnic groups), we often hear people, media, and scholars alike, talk about education "to promote tolerance." Developing tolerance toward differences is often lauded as the major goal of multicultural and diversity education. We believe promoting tolerance is a very important and respectable goal of cross-cultural education, especially in the context of contemporary identity politics and increased xenophobia in the U.S. and other parts of the world. However, we believe it should not be the ultimate goal of cross-cultural education.

Promoting tolerance inevitably creates an unequal relationship, or even hierarchy, between cultures/people who tolerate and are being tolerated (i.e., Who is tolerating whom?). In this context, the concept of "allophilia," developed by American psychologist Todd Pittinsky (2009), is useful in opening the possibility for development of a conceptual framework of cross-cultural education that is less hierarchical than terms such as tolerance, care, and hospitality. These terms signal uneven and hierarchical relationships between people who tolerate and are being tolerated, who care and are being cared for, and who provide hospitality and receive hospitality. Allophilia is a Greek term meaning "liking or love of the other." Although this term has also been adapted to the business world in order to train leaders with allophilia, the term may be helpful in envisioning an end goal of cross-cultural education. As one of the authors has mentioned elsewhere, "cross-cultural education is an ideological approach or strategy to education" rather than a single subject matter, method, or structure (Jo, 2006, p. 243).

In conclusion, cross-cultural education has focused on the acquisition of cultural knowledge, but the amount of cultural knowledge does not guarantee cross-cultural competence based on equality and equity of people, nor build positive and respectful attitudes toward cultures other than one's own. Furthermore, the ultimate goal of cross-cultural education should not be just to promote tolerance toward other cultures, but also to foster dignity and respect. There are two aspects of dignity; one aspect is considering other human beings and cultures as worthy of honor and respect, and the other is considering oneself as worthy of honor and respect. This goes beyond simply understanding self and other. Cross-cultural education should foster both aspects of dignity when educating across cultures; then we could build a society that does not just try to be tolerant toward differences, but embraces the differences with allophilia. Educating for and with cultural dignity and respect is not a matter of creating a subject matter and studies or programs, but also a matter of how we orient all the various kinds of cross-cultural programs and policies.

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# Cross-Cultural Differences in Visual Perception of Color, Illusions, Depth, and Pictures

# William L. Phillips

At the end of a particularly long and tiring period of trekking through the forest from one hunting group to another, I found myself on the eastern edge, on a high hill which had been cleared of trees by a missionary station. There was a distant view over the last few miles of forest to the Ruwenzori Mountains: in the middle of the Ituri Forest such views are seldom if ever encountered. With me was a Pygmy youth, named Kenge, who always accompanied me and served, amongst other capacities, as a valid introduction to BaMbuti groups where I was not known. Kenge was then about 22 yr. old, and had never before seen a view such as this ... As we turned to get back in the car, Kenge looked over the plains and down to where a herd of about a hundred buffalo were grazing some miles away. He asked me what kind of insects they were, and I told him they were buffalo, twice as big as the forest buffalo known to him. He laughed loudly and told me not to tell such stupid stories...

(Turnbull, 1961, pp. 304–305)

Anecdotes like the one above from missionaries and anthropologists dating to the nineteenth century sparked curiosity as to whether visual perception is *innate* (we are biologically predisposed to see the world as it is, with no need for cues) or visual perception is *learned* (we construct our perceptions from experience). You should recognize this as the *nature—nurture* debate espoused by the early philosophers Plato and Aristotle, and later by Descartes and Locke. When looking at this issue from a cross-cultural perspective, the question becomes, "Do group differences in perception result from *heritability* (genetic variation) or from differences in *culture* (how these groups live)?" The aim of this chapter is to illustrate some examples of differences in visual perception that exist among different cultural groups, so that we may develop a deeper understanding of people from other cultures.

The origins of methodological cross-cultural perception can be traced to the work of W. H. R. Rivers (1864–1922), a neurologist and anthropologist who was the first scientist to systematically study cross-cultural perception while on an expedition to Torres Straits, between northeastern Australia and New Guinea, thus becoming the first cross-cultural experimental psychologist (Deregowski, 1998). In recognition of Rivers' pioneering work, the first section of this chapter will focus on vision.

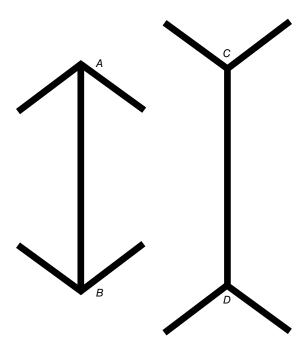
# **Color Perception**

Early work on the perception of color among different cultures typically reported that language is related to how different cultures sort color tiles. Rivers found that peoples from the Torres Straits area (Murray Island, Seven Rivers, Kuwai, and Mabuag) would sort color tiles into groups based on language (Slobodin, 1978). For example, inhabitants of Murray Island (whose language only has words for the colors black, white, and red) typically grouped green and blue tiles together. These findings were typical of other cultures (and languages) being studied at the time, and prompted the Whorf Hypothesis, which explicitly states that language determines our experience.

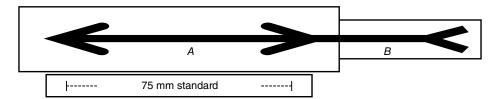
However, research has not fully supported this hypothesis. Rosch (1973) examined the color discrimination of the Dani tribe of Papua, New Guinea, and determined that although the language only has two terms (one for all dark colors and one for all light colors), the Dani were able to discriminate several colors from one another. This occurred even though, when given a sorting task, members of the Dani tribe typically sorted the color tiles into two groups. Davies and Corbett (1997) examined color sorting of native speakers of English, Russian, and Setswana. Though Russian has two words for blue (one for light blue and one for dark blue), the sortings from English and Russian speakers were very similar. The Setswana speakers, however, tended to sort the blues and greens together, and they used only one word for these colors. It seems, then, that language does not drive perception, but perhaps the importance of having particular words for different colors in a language is dependent upon the need for communicating those colors among individuals.

# The Müller-Lyer Illusion

When you first look at Figure 13.1, which of the lines appears longer? German psychiatrist Franz Müller-Lyer created this illusion in 1889 (Bermond & Van Heerden, 1996). Many people tend to judge the line segment on the left as shorter than the line segment on the right (the two lines are actually the same length—you can measure them with a ruler to confirm this).



**Figure 13.1** Line segment *AB* is typically perceived to be shorter than line segment *CD*, though they are the same length.



**Figure 13.2** Diagram of apparatus used by Rivers. The segment with divergent arrows (*B*) was to be extended to match the segment formed by the convergent arrows (*A*).

Rivers sought to determine the effect of the Müller-Lyer illusion on three groups of Murray Islanders: men, boys, and girls. At the time it was believed that the Murray Islanders (being less "civilized") would be more susceptible to the illusion (i.e., make greater errors). Participants were given a brass slide with convergent arrowheads (set at a standard length of 75 mm, and depicted as segment "A") that contained an inner slide with a divergent arrowhead at one end (see Figure 13.2).

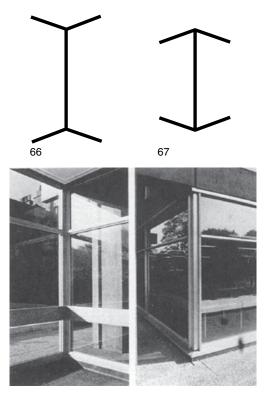
Rivers tested the three groups of Murray Islanders (men, boys, and girls) and compared their performance to three groups of English participants (students, adults, and schoolchildren). Interestingly, the Murray Islanders performed *better* than their English counterparts (they more accurately slid the guide so that the line segments had equal length).

Are these results reliable? Rivers believed that the differences were due to differences in culture between these groups (Slobodin, 1978). However, to be sure that

culture is indeed the responsible factor, the result would have to be replicated—it must be shown that the result is consistent. Segall, Campbell, and Herskovits (1966) sought to determine whether culture was responsible for differences in performance on the Müller-Lyer stimulus, using 15 pictorial depictions of the illusion. Participants judged whether line A was longer or if line B was longer. They tested more than 1,300 people in 17 different groups, including children (aged 6-11) from 12 of the groups. Most of the participants (more than 1,000) were from 10 different African countries; one small sample comprised Europeans in South Africa, another small sample included Hanunóo people in the Philippines, and 264 individuals were included in two American samples. Segall et al. found substantial differences among the groups. Data were collected in terms of the "point of subjective equality" (PSE) or "percent error greater than the standard"—referring to the percentage greater line AB had to be before it was judged equal to line CD (the typical error made by participants is to choose line AB as being the longer, when in fact the two lines are equal in length; see Figure 13.1). The PSE is then determined as the percentage of increased length line AB must be before participants begin correctly identifying it as being the longer line. Kalahari Bushmen and adult workers in South African gold mines showed virtually no effect of the illusion at all (their PSE score was 1, meaning that they correctly judged when the two line segments were of equal length). The groups most susceptible to the illusion were the two American samples: a group of university students and children and adults from Illinois.

This pattern of results clearly demonstrated differences between groups. Moreover, the results also showed that children (regardless of group) were more susceptible to the illusion than adults, with the proportional difference between children and adults for any cultural group being fairly systematic (the correlation between children's and adults' ratings for all groups was 0.81). Segall et al. (1966) proposed the "carpentered world hypothesis," which states that children who grow up and live in squared, city-block environments and rectangular buildings are more susceptible to the illusion (Figure 13.3). A second hypothesis suggested that differences in experience with pictures and drawings can explain group differences, although Segall et al. argued that this hypothesis did not fit their data as well.

How could one determine whether the differences reported by Segall et al. (1966) are due to culture (specifically, a carpentered world) or due to genetics? (It is apparent that the groups studied by Segall differed genetically.) One way to attempt to answer this question would be to select a pair of identical twins, then raise one in a "carpentered" environment and the other in a "non-carpentered" environment. Of course, there are probably ethical reasons why this should not be done (a good thing, too!). Pedersen and Wheeler (1983) did the next best thing—they tested 20 members of the Navajo Indian tribe, 10 of whom lived until at least age 6 in a *hogan* (the typical Navajo rounded house), and 10 of whom lived in a rectangular house. The results were consistent with predictions from the carpentered world hypothesis—those Navajo students reared in rectangular houses were



**Figure 13.3** A real-world depiction of the Müller-Lyer illusion in a "carpentered world setting." Retrieved from http://www.cycleback.com/muller\_lyer\_gregory.gif. Reproduced by permission of Richard L. Gregory.

more susceptible to the Müller-Lyer illusion than those raised in the *hogan*. Other studies, incorporating Chinese participants, have also shown support for the carpentered world hypothesis (Dawson, Young, & Choi, 1973).

Interestingly, most studies have used pictures (e.g., Segall et al., 1966) rather than the original hand-held apparatus incorporated by Rivers (illustrated in Figure 13.2). Bonte (1962) tested both methods of presenting the Müller-Lyer illusion on three groups of participants. The first group consisted of 150 Mbuti Pygmies from the Ituri rainforest located in the (now) eastern Democratic Republic of the Congo (formerly known as Zaire). The Mbuti are hunter-gatherers, living in small grass huts low to the ground, spending their lives almost exclusively in the forest. The second group was made up of 450 Bashi, who lived in the central Democratic Republic of the Congo. The participating Bashi lived near a large lake giving them a view of the horizon. They are largely agricultural people, living in small round huts. The third group consisted of 92 adult Europeans.

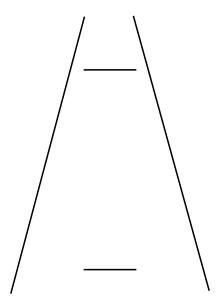
The Mbuti were unable to perform the Müller-Lyer task using the picture stimuli, so they were excluded from that analysis. Results revealed that using Rivers' apparatus, there was no difference in responses to the Müller-Lyer task. However,

when using the pictures, Europeans were more susceptible to the illusion. You may recall that the differences obtained by Rivers were much smaller than those obtained by Segall. The discrepancies in Bonte's results (as compared to Segall) have been explained by methodological differences. For example, the Rivers apparatus (Figure 13.2) creates an artificial vertical line intersecting the line segments to be compared, which does not represent the original illusion [Rivers also saw this problem (Slobodin, 1978), and later created an apparatus that hid the line formed by the meeting point of the two movable pieces]. Furthermore, Bonte presented the picture version using several stimuli per page, rather than one stimulus per page. She also used ink that faded with use, and failed to randomize the sequence of stimuli presentation (presenting length differences in ascending order—0%, 5%, 10%, etc.). Finally, Bonte did not explain how instructions were given to the non-English-speaking groups, and she combined children and adults. (She did explain that presenting stimuli one per page, in different orders, would be an improvement in the data collection process.) These were exactly the kinds of changes employed by Segall et al. (1966). In addition, Segall et al. reported a strict procedure for administering the task, incorporated experimenters who were prepared for fieldwork, and gave test trials for each illusion used, to ensure comprehension. Though Bonte's results did partially support the results of Rivers, the work of Segall et al. (1966) demonstrated the importance of strict control in implementing a research design, incorporating repeated replication, and conducting thorough data analysis to support the hypothesis that ecological cues, especially experienced during the first 10 years of life, are largely responsible for the perception of the Müller-Lyer illusion.

#### The Ponzo Illusion

A second size-depth illusion is shown in Figures 13.4–13.6. Created by (and named for) the Italian psychologist Mario Ponzo in 1913, the illusion depicts two converging lines (typically in the vertical plane) with two parallel horizontal lines intersecting the converging lines at different points. Though the two horizontal lines are of equal length, respondents typically judge the line closer to the convergent point as longer. A real-world example of this is shown in Figure 13.5 (also known as the "railway illusion").

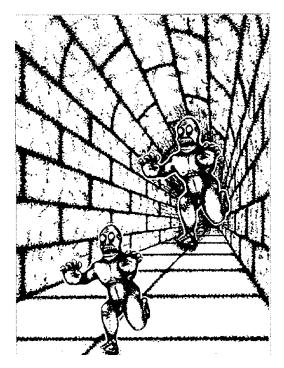
Researchers have also reported cultural differences in the susceptibility of different groups to this illusion (Brislin, 1974; Brislin & Keating, 1976; Segall et al., 1966; Smith, 1973). Though the data collected by Segall et al. were inconclusive, Smith found differences among three groups (N=30) of Xhosa tribesmen (a group of undergraduates at a local South African university, a group of urban dwellers, and a group of rural dwellers). The rural dwellers lived in villages consisting of small rounded huts in an area described as an open vista. Smith hypothesized that the most "acculturated" group (the undergraduates) would be most susceptible to the



**Figure 13.4** The Ponzo illusion, in which the top line is perceived as longer than the bottom line.



**Figure 13.5** Railway version of the Ponzo illusion. Retrieved from http://www.richardgregory.org/papers/brainmodels/brain\_model\_fig7.jpg. Reproduced with the permission of Richard L. Gregory.



**Figure 13.6** Popular variation on the Ponzo illusion. This drawing depicts several picture cues for depth: (a) relative height, (b) overlap and (c) linear perspective. "Monster" image from *Mind Sights: Original Visual Illusions, Ambiguities, and Other Anomalies*, by Roger Shepard. Copyright © 1990 by Roger Shepard. Reprinted by arrangement with Henry Holt and Company, LLC.

Ponzo illusion. Results supported this hypothesis; the undergraduates were most susceptible and the rural dwellers the least susceptible. Unfortunately, there is no report whether the three groups of Xhosa men differed with respect to their surroundings while growing up, making it difficult to suggest that these results support the carpentered world hypothesis. However, to the extent that these differences may be assumed, the data would support this hypothesis.

The situation became clearer in a study performed by Brislin (1974). He compared a group of individuals from Guam to a group from the mainland United States. At the time, Guam had very few long, straight roads, and no railroads. Furthermore, the vistas were short due to either hills or trees. Brislin tested participants using standard two-dimensional representations of the Ponzo illusion drawn on cards (see Figure 13.4). The results were consistent with the ecological cue (or "carpentered world") hypothesis; participants from Guam were less susceptible to two-dimensional depictions of the Ponzo illusion than were the mainland Americans. Brislin and Keating (1976) sought to replicate these results in an environmental context. They reasoned that if exposure to open vistas and man-made

environments was responsible for the susceptibility to the Ponzo illusion, then the illusion should be just as effective in a more natural setting. They compared a sample of 21 mainland U.S. students (all from urbanized areas) with 21 Pacific Islanders (all participants were between 22 and 40 years of age). The Pacific Islanders each had lived a minimum of their first 18 years on their home island. The islands represented had environments similar to that of Guam (described earlier) and included American Samoa, Fiji, Kauai, Marshals, Maui, Palau, Ponape, Solomons, Tonga, Truk, and Western Samoa. In addition, the researchers tested 10 participants (aged 22-40 years) from urbanized areas of the Philippines as a third comparison group. Brislin and Keating created the "natural" setting by using boards that were each 3.2 m long, set up as the converging lines of the Ponzo illusion. A board 80 cm long (the standard) was placed near the apex, with comparison boards ranging in length from 77.6 to 92.8 cm in length. A wooden house served as the background to the scene, and participants stood 13.2 m away from the display at a point equidistant from the ends of one of the 3.2 m boards (resulting in the horizontal version of the Ponzo illusion).

The results replicated those of the earlier study performed by Brislin (1974). The participants from the United States were more susceptible to the illusion (as were participants from urban areas of the Philippines). Both these groups were significantly different from the Pacific Islanders. Furthermore, Brislin assessed the reliability of judgments using this procedure, testing 12 participants 2 months later. The correlation between test–retest judgments was r=.75, suggesting a consistent finding.

In another study investigating effects of age, schooling, and environment on perception of the Ponzo illusion in Moroccan males aged 6–22, Wagner (1977) analyzed the interaction among these three variables. When seen in pictures depicting it in relatively "natural" settings (a railroad track or a field), the Ponzo illusion produced increased susceptibility in older participants, and schooling and urban environments produced increased susceptibility for these same conditions.

The results of these studies (Brislin, 1974; Brislin & Keating, 1976; Wagner, 1977) once again support an ecological cue hypothesis. The major difference between groups was the environments in which they were reared, and not education differences (all participants were attending post-baccalaureate courses in Hawaii), except for Wagner's participants, whose educational experience seemed to increase vulnerability to the illusion. These results also indicated that the Ponzo illusion persists under either two-dimensional or three-dimensional conditions. Moreover, these cues appear to be artifacts of constructed environments: straight paved roads, railroad tracks, and city-block matrices that give rise to the size-distance inference that objects farther away are larger than they appear. This inference would develop to a lesser degree in persons not exposed to great distances in their home environments. Interestingly, research has shown that differential exposure to environmental cues for the Ponzo illusion can also produce differing

responses in nonhuman animals (e.g., Nakagawa, 2002). Curiously, however, Segall et al. (1966) reported that differences with respect to a similar perspective illusion were inconclusive.

# Picture Perception: Perceiving Depth in Pictures

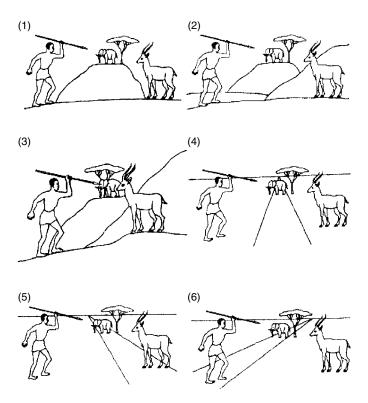
Beyond the fact that the previously discussed illusions are depicted in line drawings, it will prove interesting to consider differences in the perception of whole pictures. There has been a considerable number of reports by missionaries, explorers, and anthropologists describing how different cultures interpret images in pictures and photographs (e.g., Kidd, 1904; Livingstone, 1857), and a long history of interest in pictures, spanning millennia (Halverson, 1992). These writers have reported how pictures or photographs were not well perceived, or perceived with some initial difficulty, by people who were not experienced with two-dimensional depictions of three-dimensional scenes. Thus, Kidd (1904), writing about the Kafir of South Africa, related "The natives are frequently quite incapable of seeing pictures at first, and wonder what the smudge on the paper is there for" (p. 282). According to these reports, children often perceived the image before adults, who after some instruction also could recognize objects such as a dog or ox. Other groups have reacted quite strongly to the sight of pictures, especially of slides projected on a large screen. Livingstone (1857) gave a rather interesting account of one such episode:

Shinte was most anxious to see the pictures of the magic lantern ... he had his principal men and the same crowd of court beauties around him as at the reception. The first picture exhibited was of Abraham about to slaughter his son, Isaac; it was shown as large as life, and the uplifted knife was in the act of striking the lad; the Balonda men remarked that the picture was much more like a god than the things of wood or clay they worshipped ... The ladies listened with silent awe; but when I moved the slide, the uplifted dagger moving towards them, they thought it was to be sheathed in their bodies instead of Isaac's. "Mother, Mother!" all shouted at once, and off they rushed helter-skelter, tumbling pell-mell over each other, and over the little idol-huts and tobacco-bushes; we could not get one of them back again. (Ch. 16, Jan. 19)

Thus, it seems apparent that pictures were at one extreme (at least initially) not seen at all, to the extreme of believing they are real. However, it should also be noted that in one instance the background was a small and glossy rectangle (the photographs) while in the other projections were made on a life-size wall or screen (Deregowski, 1999). More recent work has included scientific efforts to understand how people of differing cultures and backgrounds perceive pictorial stimuli.

Some of the pioneering cross-cultural experimental work on the perception of pictures was performed by Hudson (1960). Hudson was interested in how depth in pictures would be interpreted—specifically, the pictorial cues of relative size, overlap (or interposition) and linear perspective (see Figure 13.6 for an explanation of these cues). Hudson showed a series of pictures (like those in Figure 13.7) to 273 children and 289 adults in the Union of South Africa. The adults consisted of skilled and unskilled male mine workers with varying amounts of schooling. All the children attended school, and were in grades 1–12. One group of adults were teachers from area schools. The adults varied also in their territorial origin, which included South Africa, South West Africa, the High Commission Territories, Federation of Rhodesias and Nyasaland, East Africa, Mozambique, and Angola. Data were not reported by region, but by whether the sample was of African or European descent and whether participants had experienced formal schooling.

Hudson (1960) showed his participants the line drawings of various hunting scenes (Figure 13.7), first asking them to name all the elements depicted (to ensure they understood what the pictures represented). He then asked several questions



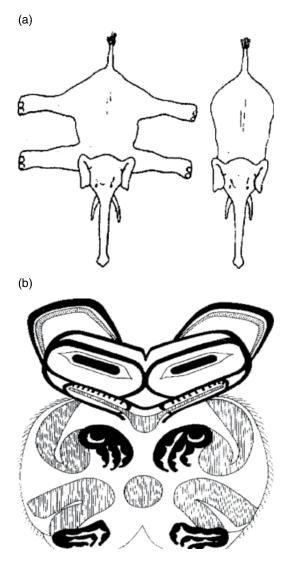
**Figure 13.7** Six of the pictures used by Hudson. F7.1 depicts familiar size, F7.2 and F7.3 Add the overlap cue, and F7.4–F7.6 depict linear perspective. Source: Hudson (1960). © Taylor & Francis. Reproduced with permission.

about relations that were depicted, such as "What is the man doing?" and "What is nearer the man, elephant or antelope?" If participants answered "antelope" to the latter question, for example, they were classified as "three-dimensional" (3D) perceivers. Hudson found that educated people, both black and white (including school children and teachers) made significantly more 3D responses than unskilled laborers (whether schooled or not), and that within the unskilled laborers group those with schooling made more 3D responses. Hudson concluded from these data that formal schooling was an important factor in determining whether a person would be a 3D perceiver of pictures. Hudson's picture test was used on many different tribal groups within Africa (presumably without formal schooling), with the majority of these investigations revealing that children and adults from these cultures tended not to perceive depth within these types of pictures (Deregowski, 1972).

In a second study, Hudson (1962; as cited by Deregowski, 1999) displayed images like those depicted in Figure 13.8a to 40 mine laborers from South Africa. Hudson asked the miners which of the two versions of the elephant they preferred. All but one of the miners preferred the "spread-eagle" version of the elephant. This is not wholly unique to these tribesmen, as this means of drawing is also depicted in the artwork of West Canadian Indians (Figure 13.8b), artwork depicted on an urn excavated near the Polish-Baltic coast and dating to the first century BCE, and in artwork from other cultures (Deregowski, 1999).

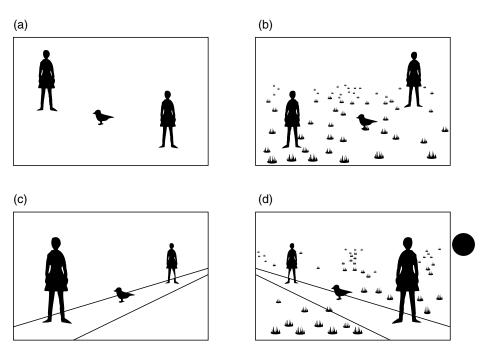
Kilbride and Robbins (1969) set out to replicate the findings of Hudson (1960) and to determine acculturation effects other than schooling that might be responsible for perceiving 3D representations in pictures. They presented 104 rural dwelling Baganda and 118 urban dwelling Baganda the Hudson picture test. The rural Baganda lived on the northern and western shores of Lake Victoria in Uganda. This group were mostly farmers, having little or no access to television, movies, or magazines, and had an average of 3.36 years of schooling. In contrast, the urban group (living in Kampala, a city of more than 200,000 inhabitants) reported having television sets in their homes (10%), owning cameras (14%), regularly reading magazines (89%) and averaging 7.47 years of schooling. Occupationally, this group included teachers, administrators, nurses, engineers, clerks, and secretaries. Results indicated that even when controlling for education differences, the urban group showed a greater tendency to be 3D perceivers. Thus, both formal education and urbanization (similar to that of Western culture) appear to influence the tendency for an individual to be a 3D perceiver.

Not all the picture research has involved samples only from Africa. Jahoda and McGurk (1974b) tested the linear perspective cue by comparing 60 schoolchildren from Glasgow, Scotland, 60 urban schoolchildren from Hong Kong, 48 "boat" children from Hong Kong (these children spent most of their lives on junks, and often experienced delayed or very limited schooling), and 59 schoolchildren from rural villages near Salisbury, Rhodesia. All participants viewed a picture similar to that in Figure 13.9 (Jahoda & McGurk, 1974a). One picture depicted only elevation as a



**Figure 13.8** (a) Example of the stimuli used by Hudson (1962). From Deregowski, J. B., "Pictorial perception and culture." © (1972) by Scientific American, Inc. All rights reserved. (b) Artistic "split" drawing of a bear by the Tsimshian Indians of the Pacific Northwest. From Deregowski, J. B., "Pictorial perception and culture." © (1972) by Scientific American, Inc. All rights reserved.

depth cue, one employed elevation plus texture, one used elevation plus linear perspective, and one employed elevation, linear perspective, and texture as depth cues. Two female drawings were added to each picture along the diagonal depicting depth—girl-girl, girl-woman, woman-girl, and woman-woman (these two figures were identical except for size, with the larger representing the woman).



**Figure 13.9** Pictures used by Jahoda and McGurk (1974a). Participants represented the size and spatial relationships in a 3D model (see text for details). Reprinted by permission of Gustav Jahoda.

Up to five different age groups (and thus levels of schooling) were tested from each sample. Each participant's task was to place two dolls on a green board (a physical model representing a 3D depiction of the picture) so as to represent the accurate size and spatial relationships depicted in the picture (see Jahoda & McGurk, 1974a, for a complete description of this task).

Replicating the results discussed earlier (Hudson, 1960; Kilbride & Robbins, 1969), the Scottish sample and the Rhodesian sample improved with age for both size and spatial relationships. However, this effect did not occur in either of the Hong Kong groups with respect to size. With respect to spatial relationships, the urban Hong Kong children did show an age effect, but the boat children did not. Of more interest to the present chapter is the difference in results between groups (not analyzed by Jahoda and McGurk). The urban groups (from Scotland and urban Hong Kong) had the advantage when making size judgments, while the two groups from Hong Kong were better at spatial relationships. This is a surprising finding in light of the work of Hudson, who hypothesized that schooling was the major factor in perception of pictures. However, the Hong Kong groups showed little and no age-school effect for the urban and boat children, respectively. In other words, the ability to make size and spatial judgments for the Hong Kong children

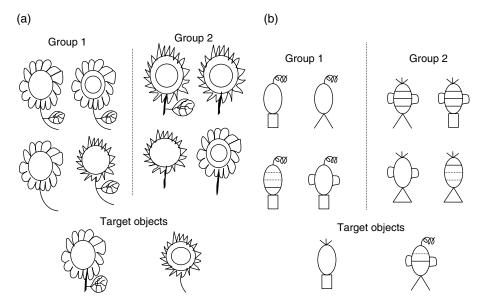
seemed to occur before schooling began; there is something else in their culture—which we will discuss in the following section—that seems to be responsible.

Bovet and Vauclair (2000) conducted a wide-ranging survey of research on picture recognition, not only in humans, but also in nonhuman animals. They concluded that picture recognition is present in humans from an early age, but that it is facilitated by previous exposure to pictures—Numerous researchers have concluded that, although naïve subjects can quickly learn to recognize objects in pictures, they may find the process effortful or stressful (e.g., Deregowski, Muldrow, & Muldrow, 1972). In addition to experience with pictorial stimuli, Bovet and Vauclair reported that familiarity with objects portrayed in pictures, and other characteristics (e.g., the presence of motion) of the stimuli contribute to individual responses.

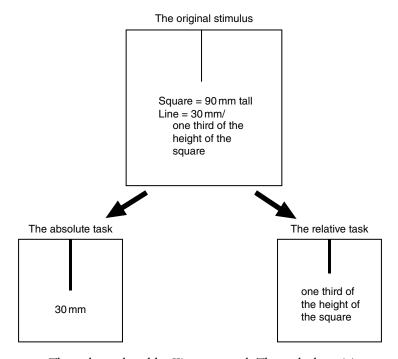
### Picture Perception: Context and Wholeness

More recent research on cultural differences with respect to pictures has focused less on cues for depth and more on context and "wholeness." For example, Norenzayan, Smith, Kim, and Nisbett (2002) investigated categorization differences among European Americans, Asian Americans, and East Asians. They hypothesized that Asians (who are more socialized to focus on interdependence within their culture) would attend more to family type characteristics than to single-rule based characteristics. Participants viewed two groups of objects like those presented in Figures 13.10a and b and attempted to determine the group to which each target was most similar. One hundred fifty-seven male and female students (52 European Americans, 52 Asian Americans, and 53 East Asians of both Chinese and Korean descent) rated the similarity of 20 stimuli. The results suggested that Asian Americans and East Asians were much more likely to judge similarity based on family resemblance (the whole stimulus) rather than one defining feature shared in common (the strategy employed by the European Americans).

Further evidence supporting the hypothesis that East Asians attend more to the "whole" rather than specific features of a stimulus comes from the work of Kitayama, Duffy, Kawamura, and Larsen (2003). They presented 20 undergraduate university students from Japan and 20 from the United States the line drawing task described in Figure 13.11. Results revealed that Japanese students made fewer errors in the relative task, while Americans made fewer errors in the absolute task. This occurred even when the researchers instructed the participants to draw the absolute length of the line or the proportional length of the line! Participants could not overcome their pre-existing bias for drawing the line—with the Japanese students emphasizing the relational nature of the task, and the Americans the absolute.



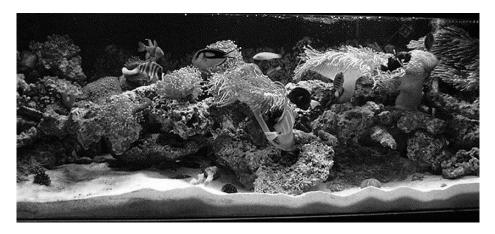
**Figure 13.10** Two stimuli used by Norenzayan et al. Given one of the two targets, participants were asked "which group the target object is most similar to." Participants could base their response on either a unidimensional rule shared by all members of the group (stem type or hair type) or choose based on overall family resemblance. Source: Norenzayan et al. (2002). © John Wiley & Sons, Inc. Reproduced with permission.



**Figure 13.11** The task employed by Kitayama et al. They asked participants to either draw the test line the same size (in smaller box that was presented—the absolute task) or proportional to the size of the smaller box (the relative task). Source: Kitayama et al. (2003). © American Psychological Association. Reproduced with permission.

The results of these two studies suggest that East Asians attend more to the entirety or "whole" of a stimulus than do Americans. If this hypothesis is true, then it should occur in other, real-world contexts as well. Replications to test such hypotheses are performed to establish the ecological validity of a finding—obtaining a similar result under more naturalistic conditions. Masuda and Nisbett (2001) showed Japanese and American participants video clips of displays like that in Figure 13.12, and asked them to write a description of what they saw. Japanese participants were much more likely to begin their descriptions with a summary of the context (e.g., stationary objects in the display), whereas American participants tended to describe salient objects in the display (i.e., objects that were moving). Overall, Japanese participants reported nearly 60% more contextual information. Furthermore, in a follow-up recognition task that incorporated either the same, novel, or no background, Japanese participants were influenced by the background while American participants were not (providing a novel background impaired Japanese participants' recognition of salient objects more than it did American participants' recognition).

Masuda, Gonzalez, Kwan, and Nisbett (2008) also explored the perception of "wholes" and context in photography. Participants (37 Caucasians, 6 African Americans, 22 Taiwanese, 7 Koreans, 5 Japanese, and 12 Chinese) were instructed to take 4 portrait photographs of a model (sitting or standing in either a lab or an atrium setting). All participants were shown how to use the zoom lens and change focus on a digital camera, and all pictures were taken 9 ft. from the subject. The findings were fascinating. Americans took portraits that depicted the face on average 35% larger than photographs taken by East Asians—a finding consistent with artists' paintings in each culture. American artists tend to emphasize the individual in portraits, and to be generally more object-oriented, whereas East Asian artists



**Figure 13.12** Example of the type of scene from video clips shown to participants by Masuda and Nisbett. Clips lasted approximately 20s and were shown twice before data were collected. Photo © William Phillips.





**Figure 13.13** (a) An example of the type of photograph taken by Americans. Photo © William Phillips. (b) An example of the type of photograph taken by Asian-Americans. Photo © William Phillips.

tend to portray individuals as part of a larger context, and to be generally more context-inclusive (Masuda et al., 2008). These findings were replicated by Phillips et al. (2017) using a procedure very similar to that of Masuda et al. (see Figures 13.13a and b for photos taken by Americans and Asian-Americans, respectively). In addition, a second study by Phillips et al. also showed this result when the setting was changed to a more natural environment. Confederates approached students at picturesque locations on a campus and asked them to take a photo of the confederates as part of a photography class project (participants were unaware it was a sychology experiment). Consistent with earlier results, Asian American students included more context (i.e., the face was smaller in the photo) than European-American students.

Greater context is not only preferred by East Asians in photographs and paintings, but in their own productions as well. Wang, Masuda, Ito, and Rashid (2012) reported that East-Asian students included more information in conference posters and in electronic portals, as well as preferring more information on these products.

#### Conclusion

The preceding pages briefly highlight more than 100 years of psychological research pertaining to differences among cultures in their perception of color, visual illusions, pictorial depictions of depth, and the perception of "wholeness" in pictures and photographs. Time and again, the data support the hypothesis that variables associated with cultural differences (both physical and social) contribute

to perceptual differences found between groups. Thus, color sorting differences among cultures can be attributed to differences in language and vocabulary. Language does not influence the physiology of our perceptual systems per se, but it does drive the relations we see among objects, leading to differences in attention, organization, and other cognitive processes. The relevance of this finding does not suggest that one language is more "primitive" than another, but rather illustrates that language meets the adaptive needs of those who employ it in a particular cultural context.

The carpentered world hypothesis that physical environments (or ecological cues that relate to culture) affect our perception has been used to explain cultural differences in the Müller-Lyer and Ponzo illusions. Again, these conclusions do not imply that one culture is superior to another, but that our cognitive systems are adaptable to a variety of environments, and that our perceptual responses will vary accordingly. Moreover, this plasticity of cognitive functioning seems to be related more to exposure at a young age, than to education, as indicated by the research of Pedersen and Wheeler (1983), and that of Brislin (1974) (both of which controlled for education). The case is similar for the perception of depth in pictures. Interpretation of pictures is related to how pictures are used within a culture (whether pictures and paintings are purely ornamental and decorative or used as a means of communication), paired with ecological cues available from the environment.

Finally, socialization may be responsible for differences in perception and cognitive organization among cultures. East Asians consistently attend more to the context and wholeness of a scene, whereas Americans attend more to salient features or objects. This may be related to the interdependence of East Asians versus the independence stressed by Western culture. Another example of socialization as a mechanism occurs in the way Chinese mothers speak to their infants, in contrast to American mothers (Tardif, Shatz, & Naigles, 1997). Chinese mothers tend to emphasize verbs, whereas American mothers emphasize nouns. This could lead Chinese children to attend more to relationships among objects in an entire scene (holistically), rather than to salient objects in a scene (analytically). Again, socialization leads to differences in cognitive structure, highlighting that these structures are largely shaped by culture (Nisbett & Miyamoto, 2005).

In this chapter we have examined only a few of the fascinating perceptual phenomena that researchers have studied over many years. And, as we have seen, it is not sufficient to simply describe perceptual differences between cultures. Particular aspects of exposure within cultures—education, specific forms of experience, the cultural emphasis on the context (or the individual), the role of relationships, and many more—are important influences on perceptual processes. We thus need continued research aimed toward unraveling these influences, studies that "unpackage" (Matsumoto, 2006; Whiting, 1976) these variables and expand our understanding.

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# International Developments Influencing the Field of Intellectual and Developmental Disabilities

Robert L. Schalock and Miguel Á. Verdugo

In the first edition of this text (Keith, 2011), the first author published a chapter titled "International Perspectives on Intellectual Disability" (Schalock, 2011). The focus of that chapter was on how six (then current) factors were influencing the construct of intellectual disability (ID) and the approach taken to persons with ID across cultures. The six factors were (a) the social-ecological model of disability; (b) approaching human functioning from a multidimensional perspective; (c) aligning clinical functions related to diagnosis, classification, and planning supports; (d) the emergence of the supports paradigm; (e) understanding etiology from a multifactorial perspective; and (f) the increased role of disability policy on service/support provision and outcomes evaluation. Since 2011, these six factors have played a significant role in the field and continue to vary in their impact depending on the service delivery system's level of information, judicial protections, government benefits, financing, availability of services, and access to those services.

The present chapter expands the focus of our discussion to persons with an ID or a developmental disability. The rationale for including both groups is that they are increasingly consolidated into one field (the field of intellectual and developmental disabilities; IDD) for policy development, professional practices, service delivery, outcomes evaluation, and research. Examples of the consolidation are found in organization names (e.g., American Association on Intellectual and Developmental Disabilities), journal titles (e.g., Intellectual and Developmental Disabilities), and the terminology found in the literature (e.g., IDD, ID/DD, ID-DD).

Consistent with this consolidation, the present chapter discusses three evolving developments that are influencing the field of IDD. First, there is a better understanding of the construct of disability and how this better understanding: (a) clarifies the distinction between the constructs of ID and developmental disabilities (DDs); (b) results in terminology that is consistent with a construct's operational definition; and (c) shifts the focus of professional and service delivery policies and practices from an emphasis on defects and diagnostic labels to a focus on the multidimensionality of human functioning. Second, an integrated approach to disability is emerging that synthesizes key contributing factors from four current perspectives on disability into a framework to guide policies and practices related to the locus of disability, risk factors leading to disability, the elements of a system of supports, and subgroup classification. Third, the service delivery system is transforming to incorporate an integrated approach to disability policy development, implementation, and evaluation at the macro system level; to shift from service provision within a facility to support coordinators within the community at the organization/mesosystem level; and to become active participants in supports planning and provision at the individual/microsystem level.

# **Better Understanding of Disability-Related Constructs**

A better understanding of disability-related constructs is based on clear operational definitions. These operational definitions provide a distinction among the constructs of disability, ID, developmental disability, and DDs. The result of a clear distinction among constructs is to understand better the similarities, differences, and overlapping nature of the constructs; to use terminology that is consistent with the constructs' operational definitions; and to focus on the multi-dimensionality of human functioning.

# **Operational Definitions**

A construct is an abstract or general idea based on observed phenomena and formed by arranging parts or elements (Schalock et al., 2010, p. 218). An operational definition explains the construct and establishes its meaning and boundaries. The terminology used in reference to the respective construct is determined by its operational definition. Depending on the country (see, e.g., Brown, Weymeyer, & Shogren, 2017), one finds four commonly used constructs: disability, ID, developmental disability, and DDs. An operational definition of each appears in Table 14.1.

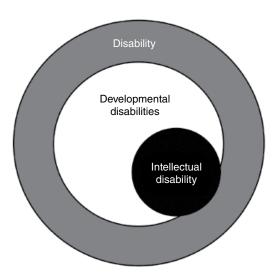
 Table 14.1
 Operational definitions of disability-related constructs

Disability-related construct	Operational definition
Disability	A significant limitation that: (a) reflects an inability or constraint in both personal functioning and the performance of socially expected roles and tasks; (b) represents a substantial disadvantage to the individual; (c) is influenced by contextual variables; and (d) can be mitigated (i.e., reduced or alleviated) through interventions and supports, or by reducing barriers that preclude opportunities, equity, and inclusion (Luckasson & Schalock, 2013).
Intellectual	ID is characterized by significant limitations both in intellectual
disability (ID)	functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18 (Schalock et al., 2010, p. 1).
Developmental disability	A severe, chronic disability of an individual that: (a) is attributable to a mental or physical impairment or a combination of mental and physical impairments; (b) is manifest before the individual attains age 22; (c) is likely to continue indefinitely; (d) results in substantial functional limitations in three or more major life activity areas that involve self-care, receptive and expressive language, learning, mobility, self-direction, capacity for independent living, and economic self-sufficiency; and (e) reflects the individual's need for a combination and sequence of special, interdisciplinary, or generic services, individualized supports, and other forms of assistance that are of lifelong or extended duration and are individually planned and coordinated (The Developmental Disabilities Assistance and Bill of Rights Act of 2000 (Public Law 105–402; Section 102–8-A).
Developmental disabilities (DDs)	A term used to refer to a group of conditions due to an impairment in physical, learning, language, or behavior areas (Centers for Disease Control [CDC], 2017).

#### **Distinction Among Constructs**

In Figure 14.1, we depict the relations among the constructs of disability, ID, and DDs. As noted in Figure 14.1, the constructs of ID and DDs overlap. Thus, some but not all people with a diagnosis of developmental disability are considered to have an ID, and as depicted in Figure 14.1, ID and DDs are not completely overlapping constructs. The construct of DDs also includes people with physical disorders (such as cerebral palsy or spina bifida) that emerge during the developmental period. In addition, some manifestations of autism spectrum disorder are included under the umbrella term DDs (Brown et al., 2017; Williams, Wheeler, Lindey, & Jacobs, 2017).

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**Figure 14.1** Relationship of intellectual disability (ID) and developmental disabilities (DDs) to the disability construct.

#### Terminology

The correct terminology used regarding the constructs of disability, ID, developmental disability, and DDs is based on the construct's definition. The need to use correct terminology associated with a particular construct is essential for valid clinical decisions and recommendations, establishing eligibility criteria for services and supports, conducting research, and useful communication across disciplines. Confusion regarding what terminology to use is reflected in the plethora of terms currently found in the literature and in statutes. Examples include "people with IDD," "IDD," "IDDD," "conditions similar to or related to mental retardation (now intellectual disability)," and "pervasive developmental disorder."

To reduce confusion, the terminology used in reference to the four disability-related constructs should be consistent with the operational definitions of those constructs presented in Table 14.1. Terminology consistent with those operational definitions appears in Table 14.2. In addition, the authors recommend that the term intellectual and developmental disabilities (IDD) should refer *only* to the *field* of intellectual and developmental disabilities. A rationale for this recommendation was discussed earlier.

#### Focus on the Multidimensionality of Human Functioning

Each of the disability-related constructs defined operationally in Table 14.1 reflects a functionality approach to disability. As defined in Table 14.1, for example, disability is the expression of limitations in individual functioning within a social context; ID is characterized by significant limitations both in intellectual functioning and

 Table 14.2
 Terminology consistent with the construct's operational definition

Construct	How to use terminology that is consistent with the construct and its operational definition	Examples of the term's use
Disability	As a broad, generalized label for individuals who exhibit significant functional limitations that cause a substantial disadvantage to the person	<ul> <li>A persons with a disability (e.g., "I have a disability")</li> <li>A bounded field of study, policy development, service/support provision, or research (i.e., the field of disability)</li> </ul>
Intellectual disability (ID)	As a diagnosis or label given to individuals who meet the criteria of significant limitations both in intellectual functioning and adaptive behavior as expressed in conceptual, social, and practical skills, and is manifest before age 18	<ul> <li>A person with ID (e.g., "I have ID")</li> <li>A bounded field of study, policy development, service/support provision, or research (i.e., the field of ID)</li> </ul>
Developmental disability	As a diagnosis or label given to individuals based on a medical diagnosis or for those individuals who meet the criteria of severe, chronic disability as specified in public law such as the DD Act of 2000 (Sec. 102 (A) (8)	<ul> <li>A person with a developmental disability (e.g., "I have a developmental disability"; "I have autism"; "I have Down Syndrome")</li> <li>A specialized field of study bounded by a precise terminology (e.g., Autism, Fragile X Syndrome, Down Syndrome, Lech-Nyhan Syndrome)</li> <li>A bounded field of study, policy development, service/support provision, or research (i.e., the field of Autism or the field of Down Syndrome)</li> </ul>
Developmental disabilities (DDs)	As a broad, non-categorical label for a chronic disability manifest before age 22 but limited to persons with a specific diagnosis OR for those whose disability (manifest before age 22) results in substantial functional limitations in three or more major life activity areas and who require long-term services and supports	<ul> <li>Down Syndrome)</li> <li>"Individuals with developmental disabilities"</li> <li>A bounded field of study, policy development, service/support provision, or research (i.e., the field of developmental disabilities</li> <li>An administrative definition (e.g., "Five percent of our state has developmental disabilities and 80% are receiving services and supports</li> </ul>

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Table 14.2 (Continued)

Construct	How to use terminology that is consistent with the construct and its operational definition	Examples of the term's use
Intellectual and developmental disabilities (IDD)	As a broader, combined field of ID and developmental disabilities	<ul> <li>Persons with intellectual and developmental disabilities</li> <li>A bounded field of study, policy development, service/ support provision, or research (i.e., the field of intellectual and developmental disabilities)</li> <li>Organization names and journal titles where the focus is on both ID and DDs (e.g., AAIDD, Journal of Intellectual and Developmental Disabilities, American Journal of Intellectual and Developmental Disabilities</li> </ul>

adaptive behavior; and developmental disability is characterized by substantial functional limitations in three or more major life activity areas. This functionality approach to disability is also consistent with the functioning dimensions of body structures and functions, personal abilities, and participation proposed by the World Health Organization (WHO) in its *International Classification of Human Functioning, Disability, and Health* (ICF) (World Health Organization, 2001) and the multidimensional framework of intellectual functioning, adaptive behavior, health, context, and participation proposed by the American Association on Intellectual and DDs (Luckasson & Schalock, 2013; Schalock et al., 2010).

As discussed more fully in Luckasson and Schalock (2013) and Schalock and Luckasson (in press), a focus on the multidimensionality of human functioning has at least four implications for the field of IDD. These involve: (a) determining eligibility for services and supports based on significant limitations in major life activities; (b) providing individualized supports to enhance human functioning; (c) aligning human functioning dimensions with specific support strategies and outcome domains; and (d) using a multidimensional approach to subgroup classification.

# An Integrative Approach to Disability

The integrative approach to disability described in this section of the chapter extends the recent work of Schalock, Luckasson, Tasse, and Verdugo (2018), and is based on the synthesis of key contributing factors to the field of IDD from four current perspectives on disability: biomedical, psychoeducational, sociocultural,

and justice. The biomedical perspective emphasizes genetic and physiological factors that result in a disability; the psychoeducational perspective emphasizes intellectual, psychological/behavioral, and learning limitations associated with a disability; the sociocultural perspective emphasizes the interaction between people and their environments through which social meaning of disability develops from society's common beliefs, behaviors, language, and events around people with a disability and the responses of individuals to the interaction; and the justice perspective emphasizes that all individuals, including those with a disability-related diagnosis, have the same human and legal rights as those without a disability.

Table 14.3 summarizes how information obtained from the synthesis of these four perspectives provides a framework to guide policies and practices related to the locus of disability, risk factors leading to disability, a system of supports to prevent or mitigate disability, and a systematic approach to subgroup classification. The framework is based on the work of Brown et al. (2017); Dean, Fisher, Shogren, and Wehmeyer (2016); Florian (2014); Hare, Vahey, and Wittkowski (2016); Lombardi, Chia, Schalock, and Claes (2017); Luckasson (2016); Nussbaum (2011); Schalock and Luckasson (2015); Schalock et al. (2010); Schalock, Luckasson et al. (2018); and Shyman (2016).

In addition to providing the framework to guide policies and practices described in Table 14.3, an integrative approach to disability places policy makers, clinicians, service providers, consumers, and researchers in a better position: (a) to integrate the multiple risk factors impacting a person's disability; (b) to guide prevention efforts toward a multidimensional approach; (c) to identify variables that act as either moderators or mediators affecting the expression and characteristics of the disability; (d) to individualize, synthesize, and prioritize intervention strategies across environments; (e) to provide a more complete theoretical foundation for wrap-around supports that incorporate all members of a support team; (f) to evaluate from a holistic perspective the outcomes from one or more elements of a system of support; and (g) to focus policy development on a multifactorial understanding of disability. An integrated approach to disability also improves communication among diverse professionals; increases understanding of disability, including its causes and amelioration through a system of supports; and expands thinking about how to improve global circumstances of people with a disability to enhance their functioning and personal well-being (Schalock, Luckasson et al., 2018; Shogren, Luckasson, & Schalock, 2017; Verdugo, Jenaro, Calvo, & Navas, 2017).

# **Service Delivery System Transformation**

There is a coalescing among the six factors described in the introductory section of this chapter and the two international developments (better understanding and integrative approach) just discussed. The result of this coalescing is to bring about significant changes in the IDD service delivery system in many countries.

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**Table 14.3** A framework to guide policies and practices consistent with an integrative approach to disability

Integrative component	Guidelines for policies and practices
Locus of disability	<ul> <li>A multidimensional approach is used to reflect the interactive nature of disability and the significant role that internal conditions and external environments play in: (a) the expression of genes and brain development; (b) the dynamic and reciprocal engagement among intellectual functioning, adaptive behavior, health, and participation; and (c) the size and complexity of the discrepancy between personal competence and environmental demands.</li> <li>Components of a multidimensional approach to disability include intellectual functioning, adaptive behavior, health, participation, and context.</li> </ul>
Risk factors leading to disability	<ul> <li>Types of risk factors include (a) biochemical factors related to biologic processes such as genetic disorders or poor nutrition; (b) neural or brain development disorders; (c) social factors related to social and family interactions; (d) behavioral factors related to potentially causal behaviors such as dangerous (injurious) activities or maternal substance abuse; and (e) educational factors related to the availability of learning supports that promote intellectual development and the development of adaptive skills.</li> <li>Timing of risk factors involve (a) prenatal such as chromosomal disorders, poverty, parental drug use, lack of preparation for parenthood; (b) perinatal such as birth injury, lack of access to prenatal care, parental rejection of caretaking, or lack of knowledge about interventions and supports; or (c) postnatal such as traumatic brain injury, impaired child-caregiver interactions, child abuse and</li> </ul>
A system of supports	<ul> <li>neglect, or delayed diagnosis.</li> <li>Professional interventions are professionally-based therapies and therapeutic techniques such as those listed in Table 14.4.</li> <li>Inclusive environments are those that: (a) provide access to resources, information, and relationships; (b) encourage growth and development and support people; and (c) accommodate psychological needs related to autonomy, competence, and relatedness. Examples include supported employment, supported living, supported/inclusive education, and aging in place.</li> <li>Individualized support strategies include natural supports, technology, prosthetics, life-long learning, reasonable accommodation, incentives, personal strengths/assets, and respect.</li> <li>Criteria: A system of supports needs to be relevant to the person, appropriate, timely, consistent, person-centered, respectful, and evidence-based.</li> </ul>

Table 14.3 (Continued)

Integrative component	Guidelines for policies and practices
Subgroup classification	<ul> <li>Subgroup classification is related to purpose. Primary purposes include describing functional levels, operationalizing the level of support needs, determining health and legal status, categorizing personal outcomes based on one or more human functioning dimensions, establishing eligibility for interventions or supports, guaranteeing equitable rights and benefits, or conducting research.</li> <li>A systematic, sequential approach to subgroup classification involves: <ul> <li>(a) stating the purpose of the classification;</li> <li>(b) identifying the elements (e.g., etiology, IQ ranges, adaptive behavior levels, intensity of support needs) to be classified;</li> <li>(c) using relevant information such as etiological categories or assessment results; and</li> <li>(d) using clearly and purposeful classification terms.</li> </ul> </li> <li>Potential classification elements associated with human functioning dimensions are: <ul> <li>(a) intellectual abilities-IQ ranges;</li> <li>(b) adaptive behavior-adaptive behavior levels;</li> <li>(c) health-health status;</li> <li>(d) participation-participation domain and participation themes;</li> <li>(e) context-personal facilitators and inhibitors; and (f) support needs-intensity of support needs</li> </ul> </li> <li>Currently used classification terms include mild, moderate, severe, profound; clinically indicated etiological groupings; mild, moderate, substantial pervasive; or support needs, substantial support needs, or very substantial support needs.</li> </ul>

In these countries, significant changes are occurring at the macro, meso, and micro levels of the service delivery system, driven largely by the social-ecological model of disability; the human, legal, and disability rights movements; the supports paradigm; and the need for accountability across system components. As discussed in this section of the chapter, at the macrosystem (cultural) level, there is an emerging integrated approach to disability policy development, implementation, and evaluation. At the mesosystem (community) level, organizations are transforming their policies and practices to become more support coordinators within communities than service providers within facilities. At the microsystem (individual) level, service/support recipients (people with disabilities) are becoming more active and involved in their own supports planning, implementation, and evaluation. As with the six factors discussed in the 2011 chapter (Schalock, 2011), the quantity and quality of these changes vary depending on the service delivery system's level of information, judicial protections, government benefits, financing, availability of services and supports, and access to those services and supports.

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#### Macrosystem: Integrated Disability Policy

A recent special issue of *Intellectual and Developmental Disabilities* (August, 2017, Volume 55, #4) was devoted to changes occurring at the macro system level in the approach taken to disability policy development, implementation, and evaluation (Schalock, 2017; Shogren et al., 2017). Chief among these changes are:

- To base disability policy development on core concepts and principles such as
  those embedded in the United Nations Convention on the Rights of Persons
  with Disability (UN, 2006); the inclusion of desired policy outcomes that
  guide policy implementation and evaluation; and incorporation of current
  knowledge about disability, including the operational definitions presented
  in Table 14.1 and the terminology suggested in Table 14.2 (Turnbull &
  Stowe, 2017).
- To implement disability policy based on an understanding of context and the alignment of policy goals with specific elements of a system of supports that are intended to enhance policy-driven personal, family, or societal outcomes (Verdugo et al., 2017).
- To use a systematic approach to policy evaluation that focuses on the assessment of personal, family, and/or social changes (i.e., outcomes) that follow as a result of the supports provided to the persons to whom the policy is directed (Claes, Ferket, Vandelvelde, Verlet, & DeMaeyer, 2017).

#### Mesosystem: Support Coordinators

At the mesosystem level, organizations providing services and supports to persons with an intellectual or developmental disability are undergoing significant transformational changes. Chief among these is that these organizations are shifting their mission and focus from being a service provider within a facility to being a support coordinator within community-based integrated environments. This shift requires not just a commitment to enhancing the quality of life of individual people receiving services, but also embracing and implementing the supports paradigm that involves assessing environmental demands and resources, determining the pattern and intensity of a person's support needs, and coordinating the procurement and provision of the elements of a system of supports (Schalock & Verdugo, 2013; Schalock, Verdugo, & van Loon, 2018).

One of the advantages of the integrated approach to disability discussed in the preceding section is that it facilitates subsuming the term "services and supports" into a system of supports model that includes: (a) *professional interventions*, which have traditionally been considered a part of services; (b) *inclusive environments* that are based on the principles of human capacity, inclusion, and equity; and

 Table 14.4
 The elements and related components of a system of supports

Element	Related components
Professional	Dietary/nutritional
Interventions	Medical/surgical
	Pharmacological/chemical
	<ul> <li>Parenting/staff/teacher training and development</li> </ul>
	Educational support strategies
	Environmental accommodation
	Community engagement
	Policy reform
	Rights affirmation
Inclusive	• Environments that: (a) provide access to resources, information,
environments	and relationships; (b) encourage growth and development; and
	(c) accommodate psychological needs related to autonomy,
	competence, and relatedness.
	<ul> <li>Examples include supported employment, supported living,</li> </ul>
	inclusive education, and aging in place
Individualized	Natural supports
support strategies	<ul> <li>Technology</li> </ul>
	• Prosthetics
	Education across the lifespan
	Reasonable accommodation
	Dignity and respect
	• Personal strengths/assets

(c) *individualized support strategies* that have emerged from the literature regarding the supports paradigm. The elements and related components of a system of supports appear in Table 14.4. The elements and components summarized in Table 14.4 are based on the work of Lombardi et al. (2017), Schalock and Luckasson (2014, in press), Shogren, Luckasson, and Schalock (2015), and Shogren, Schalock, and Luckasson (2018).

The authors stress that the elements and components summarized in Table 14.4 are based on an integrative approach to disability and are generic to disability and not specific to a particular diagnosis. In addition, the professionally-based interventions provided, the inclusive environments created, and the specific support strategies employed will depend on the goals that are *important to* and those goals that are *important for* the individual.

A system of supports model such as that summarized in Table 14.4 influences the IDD field in at least four ways. First, it reflects the fact that multiple factors influence human functioning and personal well-being. These factors involve specific interventions; the environments within which people live, work, learn, and recreate; and the individualized supports with which they interact. Second,

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the elements and components of a system of supports act as intervening variables that allow support teams to align a person's support needs, specific elements of the system of supports, and valued outcomes. Third, the approach provides a framework for coordinating the procurement and application across the sources of supports and the environments within which supports are required. Fourth, a system of supports facilitates outcomes evaluation due to the specificity by which the supports are grouped (i.e., elements) and operationalized (i.e., components).

#### Microsystem: Consumers as Active Participants

Because of the factors and developments discussed earlier in the chapter, individuals with a disability are becoming more involved as active participants in their own personal support planning, implementation, and evaluation (Schalock, Thompson, & Tasse, 2018). Specifically, increased recognition of the human and legal rights of people with a disability has resulted in an emphasis on self-advocacy, self-determination, inclusion, and empowerment. The use of systems thinking and logic models has allowed support teams to align a personal support plan's inputs (personal goals and assessed support needs), throughputs (plan development, implementation, and review), and outputs (evaluation of results). The use of a system of supports framework, such as summarized in Table 14.4, allows support teams to use a variety of supports that reflect a social-ecological approach to disability and its amelioration. The increased availability of information technology has enabled persons with a disability to participate in settings and activities in ways they otherwise could not. And using support teams that include the individual with a disability has increased the relevancy and effectiveness of the personal support plan process.

The changes occurring at the meso- and micro-system levels have allowed support teams to incorporate a systematic and collaborative approach to the development and implementation of personal support plans. As discussed more fully by Schalock, Thompson, and Tasse (in press), these components involve understanding the person and his/her support needs; developing, implementing and reviewing the personal support plan; and evaluating the plan's outcomes. Components and implementation steps associated with a systematic and collaborative approach to personal support plans are summarized in Table 14.5.

#### Conclusion

Internationally, the field of IDD is currently influenced by the three developments discussed in this chapter. To one degree or another, these developments influence people's understanding of disability, the type of approach taken to persons with a

**Table 14.5** Components and implementation steps associated with a systematic and collaborative approach to personal support plans

Component	Implementation steps
1. Understand the person	Establish a dialog with the person     Identify personal goals
1	Identify the person's strengths and assets
	• Use a person-centered planning (PCP) process/framework
2. Understand the	Complete a standardized support needs assessment
person's support	Summarize assessment data into a user-friendly format
needs	• Integrate support needs assessment information with professional recommendations
3. Develop the personal support	• Select an outcome framework and outcome categories that are relevant to the person
plan	• Prioritize personal goals within selected outcome categories
	• Use support assessment results to identify support-related needs
	Specify a support objective for each planned support
4. Implement the	Assure adherence
personal support	Assure competence
plan	Assure differentiation
5. Review the personal	Assess implementation fidelity
support plan	<ul> <li>Assess status of the support objectives</li> </ul>
	• Discuss with the person the ongoing relevance of the goals, support objectives, and support strategies employed
6. Evaluate the outcomes	<ul> <li>Assess personal goal attainment based on the individual's input</li> </ul>
	Focus on subjective and objective indicators of goal attainment
	Determine relation between goal attainment and the
	elements of the system of supports provided

disability, and the characteristics of the service delivery system. Although crossculturally we have a better understanding of disability-related constructs, are beginning to embrace an integrated approach to disability, and are experiencing a significant transformation in policies and practices, there are still a number of challenges to the field that extend beyond national income categories and national borders. These challenges are not just the social, political, and financial constraints that many people experience; the challenges also relate to the lack of opportunities people with a disability have for full inclusion, self-determination, and equity. How both sets of challenges are addressed internationally by the IDD field will determine not just the status of a person with an intellectual or developmental disability and the role they play in society, but will also determine the quality of life they experience. 322 Cognition

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# Part V

# Consciousness

For many early writers, consciousness was the central subject matter of psychology. We generally think of consciousness as the state of our awareness, whether of ourselves or our environment. And we may think of the normal state of consciousness as the awake, alert state in which we spend many of our waking hours. Yet there is much more to consciousness, and there are fascinating differences in the cultural experience and perception of consciousness.

The experience of consciousness can be particularly interesting when we undergo such changes as falling asleep or waking from a dream. As we will see in Part V, some states of consciousness, such as dreams, can perhaps only be understood in cultural context. Just as differences in sleep and dreaming reflect differences in the reality of life for different species, and in particular different primates, so too does the meaning of dreaming vary across cultures. And, as culture influences dreaming, dreaming may in turn have an influence on culture.

In addition to our normal state of consciousness, each day we are likely to experience altered states. In addition to sleep, these may represent the effects of ingested substances, altered environmental conditions, or illness. Across cultures, the interpretation of altered states may be widely varied, and states that might seem perfectly normal in one culture may be seen as strange or abnormal in another. It is literally true that one person's hallucination may be another person's vision.

# Culture and Dreams

# Roger Ivar Lohmann

It has long been recognized that dreams can only be understood in reference to culture. Culture supplies the templates for dream imagery, interpretation, and expression. Dreams also influence culture, providing experiences that seem to confirm, modify, or extend cultural models of reality. These links indicate that dreams facilitate cultural diffusion and generate cultural diversity. Cross-culturally, the content, understandings, and uses of dreams vary to such a degree that what dreams make possible—and even what they *are*—depend on the dreamer's cultural models of reality.

Beyond these impressive findings, a much more profound and ancient connection between culture and dreams is coming to light. Dream imagery is now known to display the brain's sorting and comparing process as it incorporates and consolidates recent memories with older ones. Because memory is a primary medium of culture, this means that dreams provide us with a window through which we can witness the recording and modification of culture itself. Recent research has shown that humans spend less time sleeping but more of that time in REM (rapid eye movement) sleep than other primates. REM is the phase of sleep when dreams related to cultural updating predominate in our awareness. This pattern of sleeping and dreaming appears to be diagnostic of humankind's hypersocialness and exaggerated reliance on memory over instinct for adaptation. These qualities are themselves elements of our uniquely powerful capacity for culture. Hence, dreaming is related to the genetic evolution of our species' capacity for culture, on which our adaptive dependence on technologies from stone tools to computers is based. In short, not only must dreams be understood in terms of culture; culture can only be understood in reference to dreams.

 ${\it Cross-Cultural Psychology: Contemporary\ Themes\ and\ Perspectives,\ Second\ Edition.}$  Edited by Kenneth D. Keith.

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In this summary of the relation between culture and dreams, I discuss each of these topics in order, indicating some of the sources for these findings in the literature. I introduce the breadth of this subject and point to evidential examples. I mean for them to add up to an argument supporting the following thesis: Culture and dreams are mutually instantiating aspects of the process by which humans make models of and for reality. We see dreams intertwined with the inherently social processes by which culture is created, transmitted, received, modified, and diversified.

### Culture and Dreams: What Are They?

Culture and dreams are inseparable. In order to understand their relation, one begins best by ascertaining what each of them actually is. Doing so in an accurate and effective manner requires us to use a scientific baseline. However, to avoid inadvertent cultural bias and narrowness, that baseline must be informed by the range of diversity of ethnic or *emic* definitions and perspectives. We must also, however, guard against taking on non-scientific notions, particularly ethnic cultural precepts of researchers or the peoples they study that can subtly infiltrate otherwise scientific models. Moreover, one must take care not to assume that the scientific or *etic* point of view is assumed or even understood by people in any particular society. Non-scientific, supernatural, and traditional ethnic understandings of culture and dreams are rife among so-called "Western" peoples as well as among others. For example, many native-born (as well as immigrant) Americans believe dreams can predict the future, and make economic and personal decisions based on them (Wogan, 2017).

From a scientific point of view (one relying on the scientific method, eschewing supernatural explanations, and not beholden to any ethnic culture's traditional precepts), culture is information that is learned and capable of being transmitted to others. It exists in three media: ideas (mental representations), behaviors (volitional actions), and artifacts (material things shaped by behaviors). I refer to items of culture in any of these forms as *creations* (Lohmann, 2010b). Creations may begin in people's minds as memories and ideas, where they remain accessible only to one person. In order to transmit a creation to others, one "translates" it into one or both of its other forms which, unlike ideas, can be witnessed by others. Behaviors (including speech) can be sensed and interpreted into others' mental models the moment they are happening. Cultural creations in the form of artifacts (including written texts) can, depending on preservation, be apprehended and represented in others' minds indefinitely.

Cultural creations, including knowledge, beliefs, methods, and ideals, are representations or models. They circulate more freely and frequently within societies than they do between groups. The culture of a society—a

summary of its repertoire of creations and their relations with one another—is a system whose parts are organized into schemas that are themselves integrated into a more or less interdependent whole. Each creation draws part of its meaning, implications, and significance from its relations with others. This network of schemas is largely shared by members of a society and is built up in each individual through social learning, or *enculturation*. Once in place, the schematic network that is a culture facilitates mutual understanding and conserves cultural integrity. Each cultural system forces foreign creations, when they diffuse from other cultures, into new schemas, changing their meaning and inhibiting accurate cross-cultural understanding.

Dreams, according to the discoveries of science, are mental experiences mimicking genuine sensations that occur routinely during sleep and occasionally during trance. Barring certain brain injuries, dreaming is universal among placental mammals and known in certain bird taxa as well (Laughlin, 2011). However, as Laughlin (2011, p. 429) noted, "So far as we know now, humans are the only species capable either of communicating dream content with others, or of socially incubating, interpreting and using dream content." Dreaming and other sleep stages have been repeatedly tied to memory consolidation (Wamsley, 2014) and emotion regulation (Cartwright, 2010).

Dreams very frequently depict social interactions and challenging situations in which a representation of oneself is interacting with representations of others. These experiences are highly social and often suggest solutions to problems, tying dreams to waking cultural life. Identities and characteristics of the self or others may be conflated or altered. Sequences need not proceed in a consistent manner. One's dream self may display attitudes that one has since rejected in waking life (Fortune, 1927). Nevertheless, dream events and people are accepted as genuine while one is dreaming. This is facilitated by the fact that dream imagery is largely autonomic rather than intentionally generated.

A partial exception to the usual autonomous dream is a marginal mode of consciousness that Shayne Dahl and I have termed *volitional dreaming*. This is a skill present in some cultures in which one retains a higher degree of executive control of the imagery, enabling dreamers to shape volitional dreams into a preferred outcome (Lohmann & Dahl, 2014). A related phenomenon, *lucid dreaming*, is being aware that one is dreaming while one is dreaming (LaBerge, 1985). Lucid dreaming is a more awkward concept for cross-cultural comparison than volitional dreaming since different cultures define and model dreaming differently. Depending on what one understands "dreaming" to be or to make possible, a lucid dreamer may undertake forbidden fantasies for pleasure or undertake what are taken for physical or magical tasks to change the waking world.

Dreams and culture itself are, of course, subject to cultural modeling. Indeed, as categories they are abstractions only known to us humans as cultural representations. Scientific models are most unusual exemplars of cultural representations in that they rise above ethnic notions and are not the proper province of any ethnic

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cultural group or set of groups in opposition to others. In contrast, most cultural models are associated with or even considered by some to be the property of particular ethnic groups or traditions. They are creations contextualized among ethic cultural schemas rather than scientific ones. As such, people understand both culture and dreams in a variety of different ways cross-culturally.

With regard to culture, it is not unusual for people in different societies to believe that certain cultural things are not merely imperfect and changeable models of reality but instead simply correct engagements with reality. Social consensus and tradition lend the cultural attitudes associated with one's own society a veneer of truth. This ethnocentrism—the assumption that one's own culture is right and others are inferior—also makes cultural conventions associated with other groups automatically suspect. In other words, our own familiar culture is taken for the natural order—that is, it is naturalized. It is also beset by confirmation bias, damping critique and discouraging us from noticing its inaccuracies. Foreign or unfamiliar cultures, by contrast, are more prone to negative evaluations and dismissal insofar as they challenge our own cultural assumptions. Even scientific creations are vulnerable to such misapprehensions and denial when they contradict cherished ethnic or religious traditions. Culture thus shares with dreams the quality of appearing to be something that it is not: Just as we mistake our dreams for external reality while we are dreaming, while we are enmeshed in our own culture its precepts appear to be external reality itself rather than conventional models of reality created by human minds.

When it comes to dreams, what they are understood to be varies from one culture to the next and in the same cultures over time. Moreover, there is often intracultural variation in individual knowledge and beliefs about dreams. I have characterized this variation in terms of six types of largely implicit *cultural dream theory*. These are theories of what dreams are that are socially learned and found in different combinations in the various cultures of the world (Lohmann, 2007, 2010a). They provide templates for interpreting particular dreams when volitional control returns (normally upon waking). I have labeled them nonsense, discernment, message, generative, soul travel, and visitation theories. Nonsense theorists regard dreams as meaningless nonsense. Discernment theorists consider dreams a venue for higher understanding. Message theorists hold that dreams are communiqués. Generative theorists describe dreams as magically causing events in waking reality. Soul travel theorists view dreams as what one sees as one's personal spirit moves outside the body during sleep. Finally, visitation theorists regard dreams as visits from those who speak to one during the vision.

If one learns to understand dreams as visits from spirit beings, one will act on a dream of a dead relative differently than one would in a culture where one learns to assume that dreams are nonsensical jumbles. Of course, real culturally learned ideas about dreams are more nuanced and variable in the details than is captured in the six cultural dream theory types. Surprisingly, much is up for grabs. Culture has tremendous power to inform (and misinform) dreamers not only about the

supposed meanings of their dreams after they awaken, but also to shape what we dream. In other words, dream images are themselves cultural creations, and their content, style, and frequency are characteristically and differently patterned from one culture to another.

For example, according to Jadran Mimica (2006), the Yagwoia people of Papua New Guinea stereotypically apprehend their dreams during and after waking not as reflecting the inner world of their imaginations, but as taking "place in the exteriority of their world. Any Yagwoia dreamscape is an objective, exterior land-scape ... Dream experience is engendered by a person's soul-component which in sleep becomes detached from the body" (p. 28). Although Mimica emphasized that Yagwoia dreamers believe their souls to be wandering in the physical world where they can witness its occurrences, they nevertheless often grammatically mark accounts of such visions with a morpheme indicating that dream events are not certain. However, dreams are still regarded as having practical consequences and uses.

Since dreams and dreaming are not considered to be the same thing in all cultures, realizing that what one experienced was (or is) a "dream" is not the same in all cultures. For a culture where dreams are supposed to be magically creative, one would not be able to calm oneself following a nightmare that it was "just a dream," that is, powerless random nonsense. Dreaming can be dangerous according to a culture's models (Dahl, 2014). Moreover, when people are convinced that their dreams can kill, they can actually become life-threatening due to the *nocebo effect* (Adler, 2011). People base their actions on their own understandings of reality—how they answer the questions, "What is culture?" and "What are dreams?" These understandings, or models, are themselves cultural creations.

# Cultural Templates Shape Dream Imagery, Interpretation, and Expression

Culture is organized in people's memories as schemas—mental models made up of networks of association (Strauss & Quinn, 1998). Cultural schemas are built through experience. They act as templates with which our minds autonomically categorize the stream of experienced images and sensations into familiar units. In this way they affect the content and interpretation of both waking and dreaming experiences.

The result is often dramatically different experiences of the same phenomena depending on which cultural schemas are present in a person's mind. This became obvious to me one night while sheltering with Asabano people in a remote camp in central New Guinea. One of my companions suddenly became afraid. I could see no cause for his fright and asked him what was the matter. He said that he had just heard a certain bird—one that only sings during the daytime.

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This meant to him that a cannibal witch was nearby. Growing up in his culture he had learned that most deaths, regardless of outer causes, are actually the result of witch attacks. These witches are "known" to be able to take the form of other animals. One can tell when an animal is actually a witch if it behaves strangely. If one has a twinge of fear for no obvious reason, that too is considered an obvious sign that one is being stalked by a witch. I had not even noticed the bird call as distinct from the cacophony of now-familiar but undifferentiated nocturnal rainforest sounds. I had not learned to associate it with danger. Nor was the cultural category "cannibal witch" and all it stands for part of my cultural repertoire of what exists. Hence, our different culturally learned schematic templates caused each of us to have radically different experiences of the very same outer phenomenon.

Both sensory percepts and internally-generated mental images are shaped according to their schematic associations. Therefore, they have an effect on what dream imagery presents itself and how we understand and react to that imagery, even while in the midst of the dream. The same dream imagery can be interpreted in radically different ways depending on the cultural context in which it is experienced or shared (Tedlock, 1987).

Allow me to provide another example from my ethnographic fieldwork among the Asabano. One morning I awoke in anxiety, having just dreamed an image of my laptop computer on top of the fire in my hearth. I immediately thought to myself, "I must be concerned about my irretrievable field notes being accidentally destroyed." My cultural model of dreams included the notion that they reflect our concerns but do not accurately depict outer reality as it is or will be. Shortly afterward, the local pastor dropped by for a visit and I told him about my dream. His immediate reaction was that I should take special care with the fire, because the dream might have shown what will happen in the future.

Even "the same" dream in culturally different minds is qualitatively and semantically different, because our different learned categories, associations, and significances point us to often radically different visions. Dream images, perhaps even more than waking percepts, are incomplete fragments from which our minds construct more rounded depictions based on cultural assumptions about what exists. Schemas direct our attention and complete ambiguous glimpses according to expectations (Neisser, 1976). These expectations are themselves subject to revision as schemas change over time in light of new experiences. Incomplete, biased, and not entirely accurate cultural models of reality, then, are the templates with which our minds filter and supplement both sensory data and dream images.

I have shown how cultural templates can shape what people dream about, how dream imagery is apprehended and appreciated during the dream and after waking, and how a remembered dream fragment is interpreted. Certainly, what one notices and how one connects dream images into a sequence that one considers meaningful according to some measure, are profoundly influenced by cultural templates. A bit more needs to be said, however, about how cultural templates shape the expression of dreams.

I have already touched on one way that culture shapes dream expressions: by suggesting conventional means of turning dream images into stories. Guided by tradition, we transform fragmentary memories of dream images that were often disjointed bits in the first place into a single dream that conforms to local and current conventions of narrative form.

Dream narratives are not the same thing as dreams themselves. Although it is easy and common—even among researchers, unfortunately—to conflate the two, the only access we have to our own dreams after the fact, and others' dreams ever, is after they have been systematically distorted. Dream memories may be shared in the form of speech (Charsley, 1992). They may also be enacted in performances such as Xavante songs and celebrations that represent occurrences witnessed in dreams (Graham, 2003). Or they may be transmitted through graphic representations such as the ancient Mayan glyph representing a dream-animal ego (Houston & Stuart, 1989) and the Buddhist stele depicting the Buddha's conception through his mother dreaming of a white elephant entering her body (Williams, 1975). Sharing dream narratives introduces their content to others via the media of behaviors or artifacts. The cultural transmission of dreams, like other "private" mental representations, cannot be done until they are translated into "public representations" (Sperber, 1985). For dreams to influence the stream of a cultural tradition beyond the mind of a single dreamer, like other creations, they must be expressed in forms perceivable by others.

Dream narratives may be constructed from memory, supplemented to draw out a point, or even made up. They may be told to solicit interpretations or used to justify a claim, such as legitimacy for political power (Fabian, 1966) or reaffirmation of a religious doctrine (Mittermaier, 2010). Dream narratives give a dream legs, so to speak, enabling it to have knock-on effects in people's thoughts and actions going forward.

Even in cases where a dream is not expressed in narrative form, elements or consequences of it may be subtly expressed in other ways that enable it to influence cultural flows for generations. We see this when dreams inspire artistic styles or breakthroughs in understanding that turn out to be trend-setting or seminal.

# Dreams Confirm, Extend, and Modify Cultural Models

Michele Stephen (1989) coined the term *autonomous imagination* for the autonomic source of dream imagery. Dreams' subconscious origin makes their events and characters appear to be other rather than self—there is thus an apparent "duality of agency" in dreams (Jedrej & Shaw, 1992, p. 11). When we do not learn to recognize our own autonomous imaginations as the author of our remembered dreams, we are prone to seeing them as a source of accurate knowledge about the world—and knowledge is, after all, a form of culture. Since our dreams reflect in imagery and associations the novelties we have been exposed to each day, many people have

learned to interpret them as additional data corroborating what they have learned from other sources. From a scientific perspective, this is an error, but it is nevertheless a very common pattern cross-culturally.

The fact that dreams are inner projections that are autonomically produced gives them a powerful role as personal experiences that are often taken for "evidence" confirming what people learn through enculturation. For example, Asabano people learned to regard religious notions that they learned from elders, and later from missionaries, as true when they had personal experiences in dreams that seemed to illustrate or demonstrate these claims. When hunters attributed kills of fat game to dreams in which sprites had told them where to hunt in exchange for a gift, young men tried their elders' practice of leaving offerings for the sprites. Going to sleep with expectant minds, they often dreamed of receiving advice in their turn. Subsequent successful hunts then cemented and maintained the tradition.

When such dreams come to one unbidden, it is understandable that people are tempted to regard them as showing external reality or actual divine messages rather than being products of their own autonomous imaginations re-presenting and re-contextualizing notions about what exists and how we should behave that had been demonstrated or advocated by others in their society. "This autonomous aspect of dreams means that their innovative imagery and creative effect cannot be attributed to deliberate conscious construction," Katie Glaskin (2005, p. 298) pointed out in her account of how the aboriginal Bardi people of Australia use dreams to access ancestors and their knowledge. A Bardi woman dreamed that her deceased father confirmed he had helped her win money playing cards. He also told her that the dead do not like card players' practice of bringing deceased relatives' hair or photos to card games for luck. Glaskin (2005, pp. 308–309) wrote,

In her view, her deceased father had transported her to the cemetery where they spoke, and the experience had an experiential reality with a bodily dimension. She told me that when she woke up she had *marulul* leaves in her hands from the trees in the cemetery (those trees are not found in other parts of the community). She also held bits of grass and *pindan* (earth) which she had been running through her fingers in the dream.

We can see here how cultural beliefs about the nature and validity of dreams shape the form and interpretation of dream images. Such cultural templates also encourage dreamers to interpret subsequent waking phenomena as causally connected or supporting the notion that the dream was "true" (Edgar, 2006). In this case, the dreamer equated the items found in her hand when she awoke with those seen in the dream.

The Bardi woman told others in her community about her apparently true dream, convincing them to cease the practice of bringing mementos of the dead to card games. This example illustrates how traditional cultural conventions—like regarding dreams as a source of accurate information about the external

world—can themselves be conserved while generating extensions, innovations, or changes to other aspects of a culture. Dreams present the mind's eye, ears, and even nose, tongue, and skin with novel juxtapositions and combinations that are strangely relevant to current concerns. This makes dreaming a powerful force for creativity that extends far beyond the inner mind or the single person. Dreams have inspired insights and inventions (Barrett, 2001), artworks and art genres (Glaskin, 2011), and political and religious actions (Edgar, 2011). Even what names to give children and which lands to leave wild or develop are influenced by dreams (Heijnen, 2013). Thus, some dreams are expressed in the form of wars, technologies, building projects, and even natural areas left undisturbed. Dreams are imprinted on culture in all of its three media.

#### **Dreams Diffuse and Diversify Culture**

The confirming and creative power of dreams, to many human minds, also makes them important in the spread of culture from one group to another (diffusion) and in the generation of cultural diversity. First of all, dreams and dream narratives inspire and lend impetus to expeditions of colonialism and conquest, through which cultural creations are transmitted across social, political, and geographic boundaries (for several examples, see Van de Castle, 1994, p. 24). This use of remembered dreams is part of a larger phenomenon, in which cherry-picked dream sequences are often seized upon to justify decisions (Lyon, 2010).

It is not unusual for expeditions by merchants, conquerors, and missionaries to be spurred on by dreams.

Once people learn of exotic cultural elements from such foreign contacts, they must evaluate them. The role of dreaming to incorporate new experiences into one's model of reality takes center-stage in moments of cross-cultural contact to aid in making sense of foreign and hence initially ill-fitting cultural creations.

For example, when Asabano people first heard a missionary speak about angels, Heaven, and Hell, they naturally dreamed of these beings and places. In such dreams they saw Jesus, were escorted by angels to Heaven, and witnessed hellish conflagrations that appeared to confirm by personal experience that the missionary's claims were true (Lohmann, 2000).

Dreams help people resolve conflicting understandings of reality that arise in cultural contact situations. Ethnographers often find their dream worlds greatly altered when they are in the field, as they process and try to resolve the flood of foreign cultural understandings with their own. In my own experience while studying supernatural beliefs among the Asabano, I dreamed of a ghost of my late sister that combined elements of Asabano and American cultural notions, despite not personally believing in ghosts (Lohmann, 2016). Similarly, Tamara Kohn (1995, p. 48) described how one of her Nepali informants began having and sharing more intense and strange dreams when she came to visit in England.

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Dreams also promote cultural diversification: the process by which social groups split into "daughter" cultures and, once separated, culturally evolve in different directions. One reason for this is that dreams present images to credulous sleepers whose autonomous imaginations are not constrained by the physical characteristics of the environment: flying is possible, spirits are tangible, the dead can talk. When people formulate these images into narratives and share their experiences, models of novel extra-environmental phenomena enter one daughter culture but may not diffuse to others. Without having access to the same imaginary phenomena autonomously generated by dreams, cultures accumulate differences over time.

For example, Australian aboriginal cultures typically include beliefs in a dreamtime—a period when the current natural order was created that is also accessible to people's souls when they dream (see, e.g., Poirier, 2005). Such beliefs are not known in aboriginal European cultures, indicating that different notions of what exists and what is possible evolved in part from different dream experiences over the long period since these peoples' distant ancestors shared a common culture.

As already noted, other innovations—be they in art, technology, social organization, or any other area of cultural knowledge—are also facilitated by the creative power of dreams to suggest novel solutions to dreamers during sleep and in thinking about their dreams after waking. Indeed, the ability to dream may have evolved because "dreams are thinking or problem-solving in a different biochemical state than that of waking" (Barrett, 2007, p. 133).

When our distant ancestors evolved the capacity for culture and language, the creative potential of dreams took off and formed different streams of tradition as groups have separated and come together. Since then dreaming has produced innovations through its autonomously generated images that found their way, filtered and altered as memories, to our conscious minds. Another way that dreams can make cultures evolve, become progressively more different from one another in isolation, and hybridize when they come together, is through the role they play in updating cultural information in light of new waking experiences.

# **Dreams Depict Cultural Updating in the Mind**

Sleep is now known to be involved in various aspects of memory consolidation. The stages of sleep host particular sorts of dreams whose content corresponds to the kind of memories that are being processed and reconciled with earlier understandings. Thus, dreams occurring during REM sleep have high emotional and motivational content (Smith et al., 2004). REM sleep appears to be related to assessment of models of reality in light of their general significance. In contrast, dreams during non-REM (NREM) sleep re-play fragments of experience and

appear to be more associated with forming memories of particular events (Baylor & Cavallero, 2001).

However, the memory consolidation process of sleep and dreams does not create perfect records of past events because their primary role is to reconcile recent events and general understandings of reality that have been built up from memories of earlier events. As our experiences suggest supplementary, different, or conflicting generalizations to account for them, ambivalences and uncertainties must come to the fore and be sufficiently patched to enable us to carry on with a semblance of certainty during waking life (Lohmann, 2009). Processing of recent experiences in sleep by recalling and placing novelties into the context of existing schematic memory networks alters our memories of events and our representations of reality. This may be why sleep, and especially the deep, slow-wave sleep associated with NREM dreams, has been found to introduce inaccuracies into our recollections of what actually occurred in our past. While episodic details are distorted, the general cultural principles of what exists in the world and how we should act are usefully preserved and enhanced in light of new experiences (Payne et al., 2009).

Even more exciting is the finding that dream imagery in effect depicts the process of cultural updating in the mind. As Erin Wamsley and Robert Stickgold (2011) have found, sleep mentation incorporates isolated elements of a waking episode, intermingled with fragments of other recent memories, as well as remote and semantic memory material, thus creating "novel and sometimes bizarre scenarios which do not faithfully represent any particular waking event.... [R]eports of sleep mentation reveal that recent memory fragments are reactivated in an interleaved fashion with past experience and semantic knowledge." Such observations illuminate how the brain "transforms" memories over time by integrating recently acquired information into existing knowledge structures.

As one learns more details of the culture in which one has grown up, by taking up a new hobby or learning a game, for example, dream images of the challenging new material appear interspersed and mixed with images deriving from earlier memories. In cross-cultural encounters, images from one's native culture and that of the novel society juxtapose and hybridize (Lohmann, 2016). This imagery, when recalled by dreamers after they wake, obviously relates to current events of import in their lives. These dreams also bring subconscious associations to awareness through autonomic imagining that can be apropos or useful in waking life.

We build, update, and pass on cultural dream theories to account for these qualities. Some of these evoke and seem to justify belief in supernatural beings and powers. Edward Burnett Tylor (1877) pointed out long ago that dreams depicting spirits as real are a source of waking religious beliefs. While Freud (1900/1965, p. 309) recognized that dreams are shaped by "day residues," Tylor's suggestion illustrates that what I have called "night residues," or memories of dreams, enter waking awareness in the same way that day residues enter dreaming awareness. Night residues can influence how we interpret happenings when people culturally

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learn to regard their dreams as "true" or when they mistake dream memories for waking ones. In this way, too, dreams contribute to cultural model building and sharing (Lohmann, 2003). Thus, we remember fragments of our dreams and can take them into account as we think about what exists in the world. When we see supernatural phenomena like gods, dead relatives somehow still living, and magical transformations in our dreams, they appear to be a part of the real world, not autonomic figments. Once people learn from elders and their own dreams to assume cannibal witches or divine beings are real, they interpret waking events as manifestations of their power. Dreams are one of the main reasons that supernatural beings and powers are so often a part of cultural models of reality.

At last we are building a more accurate understanding of what dreams really are and uncovering their actual contribution to culture. Dreams' resemblance to, as well their departures from, our current waking visions of the world result from the interleaving, flashing images of recent events with snippets of earlier representations. When we see these juxtapositions in dreaming mentation, we are privileged witnesses to our own mind's associational machinery in action as it seeks possible correspondences to assess significance and update relevant cultural "files" in the light of new discoveries.

Not only are dreams involved in the newest, cutting-edge developments of culture in every human mind. Dreams are also connected to the very origins of culture in the ancestors of humans.

# **Evolutionary Origins of Human Sleep Patterns** and the Capacity for Culture

Humans are unique among animals in both our cultural abilities and the extent to which we rely on culture to adapt in the diverse environments into which we have inserted ourselves. Are the sleep patterns on which dreams depend also unusual among humans as opposed to other primates? We now know that the answer is yes. Human sleep duration is shortest, and the proportion of time spent in REM compared to NREM sleep is the highest among all primates so far studied (Samson & Nunn, 2015). Samson and Nunn suggested several selective advantages that could have driven the evolution of these differences. Shorter sleep overall would have left more time for social learning while awake and shorter periods of vulnerability to predators while asleep. Lengthier periods of REM dreaming would have allowed opportunities to rehearse responses to threats from predators or social situations. They would also have enhanced the creativity, innovation, and memory consolidation opportunities that dreaming sleep provides.

Such findings suggest that the evolution of the unusual human pattern of sleep and dreaming is functionally related to the origin of our exaggerated capacity for culture. This capacity is characterized by an ability to generate, recombine, and remember creations including cultural models of the world that we learn from others through enculturation. While genetic evolution results in adaptive change over long time scales and many generations, cultures can change within single lifetimes to adjust to diverse and changing conditions. Because dreaming is involved in cultural learning and updating, the unusual human pattern of sleep and dreaming probably evolved as a vital component of our distinctive capacity for culture.

#### Conclusion: Culture and Dreams Are Mutually Instantiating

Culture and dreams are parts of the process by which humans generate and update sharable models of reality, ways of doing things, and ideals. This process enables us to live in our highly social manner to mutual benefit. It allows new and revised ideas to be quickly generated and distributed with others, especially within social, political, or ethnic groupings. It makes possible culture's blindingly rapid means of adaptation to changing conditions (compared with genetic evolution). It also enables ratcheting of knowledge, whereby older ideas, behaviors, and artifacts inherited from earlier generations provide an ever-advancing baseline for accumulation and innovation of culture. Imperfect connections and rivalries among all human groups generate diverse ways of using and understanding dreams, understanding the world, and justifying action.

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# Consciousness and Culture

#### Kenneth D. Keith

For well over a century, consciousness has been a focus of attention and interest for psychologists. G. T. Ladd (1898), for example, considered consciousness the central focus of psychology, defining the field as "... the science of the facts or states of consciousness ..." (p. 7), and for William James (1892/1961), it was the "first and foremost fact ... that *consciousness of some sort goes on* ..." (p. 19). Wilhelm Wundt and E. B. Titchener also considered consciousness the subject matter of the new science of psychology (Dulany, 2009). The central importance of consciousness did not find favor with all psychologists of the era, however; J. B. Watson (1924) considered consciousness an unscientific, intangible notion that was not subject to appropriate scientific study. Watson further objected to the tendency of such writers as James and Ladd to simply assume that consciousness and other concepts did not require definition because, as James had asserted, "... everyone knows what the terms mean in a rough way" (p. 19). Watson's view presaged the hesitancy of future behaviorists to study phenomena seen as intangible, internal, and inaccessible (Ward, 1989a).

#### Consciousness

There was perhaps good reason for the reluctance of some early thinkers to define consciousness. The concept has, after all, also continued to baffle many modern scholars, prompting Dennett (1991) to observe that consciousness has sometimes left "... even the most sophisticated thinkers tongue-tied and confused" (p. 22), and contemporary scientists continue to discuss the definition and measurement of

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consciousness (e.g., Overgaard, 2017). Nevertheless, psychological scientists, including those with a particular interest in culture, have provided meaningful and useful definitions of consciousness. These definitions have typically presented consciousness in the context of a general awareness of self, and awareness of and responsiveness to the surrounding environment (e.g., Myers & DeWalt, 2015; Ward, 1994). Awareness of self and response to the environment constitute a state of consciousness that most authors consider *normal*.

Consciousness may include a number of subsystems (Tart, 1986), including exteroception (receptors, such as the eyes), interoception (internal senses, like balance), input processing (interpretation of sensory input), memory (storage of prior experiences), awareness (ability to know what is happening), sense of identity (awareness of self), emotions (e.g., fear, excitement), space/time sense (things happen now, here), evaluation (assessment of perceptual information, decision making), subconscious processes (invisible actions), and motor output (bodily responses to decisions and environment). Consciousness also, according to Tart, tends to be stabilized—meaning that, although we may experience a variety of environmental events, our general sense of self, our way of being, retains a kind of integrity and consistency.

In addition to our normal state of consciousness, we are likely, each day, to experience other, *altered*, states. Altered states have traditionally been defined as the feeling and recognition that subjective experience or the overall pattern of experience has somehow changed, often induced by psychological, physiological, or pharmacological techniques or experiences (Ludwig, 1966). More recently researchers (e.g., Revonsuo, Kallio, & Sikka, 2009) have suggested that altered states involve a change in the informational relation between environment and consciousness. These states may include sleep, dreaming (see Chapter 15 in this volume), daydreaming, meditation, or drowsiness. And, perhaps less frequently, we may also experience other altered states, such as hypnosis, hallucinations, visions, oxygen deprivation, drug-induced states, or trances.

This may all seem quite straightforward and obvious, until we ask a key question: What is *normal*? For example, the practice of hook swinging, involving suspending a person via ropes attached to hooks inserted through the muscles of the back, was practiced in numerous parts of India in the nineteenth century (Oddie, 1992). Known by various terms, including *charack* (similar to the Sanskrit word for wheel) and *soodaloo* (from the Telagu word for whirl), hook swinging served various religious purposes. Although a nineteenth-century Australian newspaper account called the practice a "brutal exhibition" that would "send a feeling of horror through the soul of any man" (Hook Swinging in India, 1892, p. 6), and the practice was sometimes intended to be punitive, hook swinging and other similar practices could induce states of ecstasy (Brighenti, 2012), and often occurred in a festive atmosphere. More recent research (e.g., Lee et al., 2016) has also documented the occurrence of altered states during extreme rituals.

So who is to say what is "normal," when one person's ecstasy may be another's "brutal exhibition" or one culture's vision another's hallucination? As Ward (1994)

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noted, the human potential for states of consciousness is culturally conditioned—a social construction, not an innate given (Tart, 1980). Yet there has been a traditional Western view that altered states may be diagnosable mental illnesses—a perspective that risks an ethnocentric failure to recognize the possible cultural value and meaning of such states (Ward, 1989a).

#### **Culture and Consciousness**

If it is true that "normal" and "altered" states of consciousness may be defined by cultural context, we might wonder whether they are unique to individual cultures, or if some altered states might be more nearly universal. In a study of 488 societies, Bourguignon and Evascu (1977) found that trance states and/or possession trance states (explained as a spirit entity taking over the body) occurred in 90% of the groups and were nearly always explained by reference to supernatural entities. Similarly, hallucinations may occur in all documented cultures, are also often associated with religious beliefs, and depend upon social context and cultural learning (Ward, 1994). Other phenomena (e.g., mystical states, hypnotic experiences, out-of-body experiences, and peak experiences) are also common (Kokoszka, 1992–1993).

Some altered states produce experiences believed in some cultures to be enlightening or liberating. Eastern civilizations have historically placed great emphasis on altered states, considering the practices of yoga, Buddhism, and Vedanta Hinduism conducive to "higher" states of consciousness (Shear, 2011), and researchers have examined the possibility of higher states of consciousness associated with meditation (Mason et al., 1997). Here we will briefly discuss two examples, hallucinations and hypnosis, to illustrate the relation between culture and altered states of consciousness.

#### The Case of Hallucinations

The importance of culture in the occurrence of altered states has been explored in the case of hallucinations, which Western textbooks (e.g., Gray & Bjorklund, 2014; Myers & DeWalt, 2015) generally describe as a symptom of schizophrenia. Although these false or distorted sensory perceptions are often explained in terms of neurological or neurophysiological mechanisms, there is evidence to support their occurrence in nonpsychotic situations (Kumar, Soren, & Chaudhury, 2009), and even in Western culture hallucinations are not always associated with diagnoses of mental illness (Lawrence, Jones, & Cooper, 2010; Pierre, 2010).

In many cultures (e.g., rural Laos, East Africa), hallucinations are not a part of locally recognized diagnostic criteria for mental illness, even though they may be experienced by many people (Edgerton, 1966; Westermeyer & Wintrob, 1979).

Thus, in Hawaiian cultural lore, some people may experience visions in the form of *aumakua*—personal spirits, usually departed relatives, who provide advice or guidance (MacDonald & Oden, 1977). A similar phenomenon has occurred in the Hopi culture of Arizona, where nonpsychotic individuals have reported clear, repeated hallucinations involving a recently deceased family member (Matchett, 1972).

Further, among people who are considered psychotic, culture may play a significant role in the experience of hallucinations. Bauer et al. (2011) conducted a large study of individuals diagnosed with schizophrenia in seven cultures in Asia, Europe, and Africa. The rank order of different types of hallucinations (e.g., visual, auditory) was similar across cultures, but the prevalence of different types varied from one place to another. The researchers concluded that culture may be one of the factors responsible for different levels of experience with hallucinations. One important aspect of culture may be the immediate environment, as Suhail and Cochrane (2002) suggested after finding that, across three cultural groups (British people living in Britain, Pakistanis living in Britain, and Pakistanis living in Pakistan), hallucinations of people with schizophrenia seemed to be more strongly influenced by current cultural environment than by broader cultural background.

Although hallucinatory experiences may exist universally, their occurrence and meaning clearly vary across cultures—a fact supported by the work of Badcock, Clark, and Morgan (2018), who found that while indigenous and non-indigenous Australians experienced similar types of hallucinations, culture may play an important role in their interpretation. And, in a study of ultra-orthodox Jewish Israeli men, Greenberg and Brom (2001) concluded that a particular manifestation, nocturnal hallucinations, were likely culture-specific.

## The Case of Hypnosis

The Society of Psychological Hypnosis, a division of the American Psychological Association, has defined hypnosis as "A state of consciousness involving focused attention and reduced peripheral awareness characterized by an enhanced capacity for response to suggestion" (Elkins, Barabasz, Council, & Spiegel, 2015). Although the discovery of hypnosis has sometimes been credited to the German physician Franz Anton Mesmer, working in the eighteenth century (e.g., History of Hypnosis, 2012), it is likely that Mesmer did not actually hypnotize anyone, and that modern hypnotism dates from the work of the nineteenth-century Scottish physician James Braid. Braid (1852) used the term "neuro-hypnotism," which he believed to be a state of focused "mental attention" that made individuals "unconscious" to other ideas or thought.

However, despite the European origins of the practice that came to be known as hypnotism, Otani (2003) has suggested that hypnosis has much in common with much older Eastern meditation practices. After all, Otani noted, Buddhist meditation, originating in India, has a history extending across more than two

millennia and embodies such similar consciousness-altering features as receptivity, absorption, and concentration (e.g., Brown & Fromm, 1986). Meditation not only predated Mesmer and Braid by many centuries, but is widespread across many cultures, especially in Asia and increasingly in Western cultures as well. According to one estimate, 18 million Americans practiced meditation by the year 2012 (Mindworks, 2018).

In an attempt to assess differences in cultural views of hypnosis, Green, Page, Rasekhy, Johnson, and Bernhardt (2006) surveyed university students in four countries, finding broad similarities in views about hypnosis, and concluding that such views may not be culture-specific. However, it is worth noting that their research participants were all students (who were likely exposed to similar kinds of media and literature), and mainly from Western cultures. In earlier work, Devereux (1966) argued that members of so-called "primitive" cultures, possibly due to an enhanced belief in supernatural or "miraculous" phenomena, were more hypnotizable than individuals in "modern" cultures. Krippner (2005) discussed the importance of social context to the understanding of hypnosis and suggested that practitioners of hypnosis may share characteristics with the "tricksters" found in some traditional societies. Tricksters are archetypal characters found in the folklore of many cultures, sometimes taking the form of animals or clowns, and often aiding relations with gods or spirits.

Native healing practices have many hypnosis-like characteristics (Krippner, 1993), and hypnosis or similar practices may well have been practiced by people in a number of ancient civilizations (e.g., Kolosimo, 1975), including pre-Columbian America (Hovec, 1975). In contemporary times, Sapp (2016) reviewed therapeutic applications of hypnosis with African American, Latino, and American Indian individuals, arguing that "Hypnosis is a technique that allows culturally distinct clients to experience the past, present, and future in phenomenologically unique ways" (p. 20) and concluding that hypnosis can facilitate a level of culturally-sensitive individual attention often not achieved by mainstream therapies.

Although hypnotic-like states may vary according to cultural context and such sociocultural variables as religion or ideological perspectives, some aspects of hypnosis seem to be common to various cultures. These include the motivation of the subject (often for wish fulfillment, goal achievement, or healing) and the presence of a culturally approved figure (hypnotist) in whom the subject believes (Jilek, 1989). Like many human phenomena, hypnotism has characteristics that are universal, and others that are culturally unique.

## **Studying Altered States**

Altered states have often escaped systematic investigation (Vaitl et al., 2005), to a large extent due to the tendency of Western researchers to study a limited range of altered states (e.g., sleep/dreaming, drug states, sensory deprivation) under

laboratory conditions, whereas field studies of important cultural aspects of the phenomena (e.g., ceremonial healing rituals, possession, visions) are less common, although of more interest to psychologists studying culture (Ward, 2013). Ward (1984) and Belle (2017), for example, have studied *Thaipusam*, a Tamil Hindu practice observed in Malaysia and numerous other countries, and involving ritualistic trances, body piercing, and possession. The altered state is induced by a bombardment of repetitive stimuli (e.g., drumming, chanting), aided by such preparatory acts of austerity and sacrifice as fasting and celibacy, while helping individuals to resolve karmic difficulties and assert Hindu identity (Belle, 2017). The influence of culture seems apparent not only in the religion/culture-bound nature of the phenomenon, but also by the fact that, although practiced by Tamils of Indian and Sri Lankan descent, *Thaipusam* has over time taken on a more Malaysian orientation (Belle, 2017).

Although the longstanding origins of cross-cultural altered states lie predominantly in the traditions of religious groups such as Hindus, Buddhists, and followers of folk religions (Ward, 1982), researchers have applied modern Western technology to the study of traditional practices in an effort to bridge the gap between cultures and between the old and the new. Flor-Henry, Shapiro, and Sombrun (2017), for example, used electrophysiological mapping and electromagnetic tomography to study brain function in a shamanic trance, and a wide variety of researchers have discussed altered states occurring as a result of such experiential trauma as warfare, childhood abuse, and torture (see, e.g., Lanius, 2015).

#### Altered States and Mental Health

Notions of psychopathology or abnormality vary widely across cultures, as do explanations for behavior considered abnormal (Tan, 2013). Similarly, some researchers (e.g., Revonsuo et al., 2009) have argued that definitions of consciousness have not made clear the distinction between altered and normal states. It is perhaps not surprising therefore, that views of altered states may fail to recognize the role of culture in shaping them, and that determinations of "normal" can be ethnocentrically limited (Ward, 1989b). Hence, behaviors like seeing, hearing, or believing things that are not physically present may be abnormal in some cultures but not in others (Murphy, 1976), or behaviors that are useful in a specific situation (e.g., a shamanic trance) may be seen as acceptable altered states in some cultures, but would be considered abnormal in other contexts (Teicher, 1954). An example may be seen in the case of ukuthwasa, a traditional South African term associated with the calling to be a traditional healer (Bakow & Low, 2018). In addition to physical symptoms, ukuthwasa involves sleep disturbance, hallucinations, and dreams (Bakow & Low, 2018; Laher, 2014), and in the Western view is a psychiatric disorder. However, traditional healers use ukuthwasa as a cultural explanation for symptoms that others would consider indicators of schizophrenia (Niehaus et al., 2004), further illustrating the influence of culture on views of altered states.

Differing cultural views of altered states in the realm of mental health present obvious challenges for assessment of psychological disorders; a particular phenomenon seen as normal in one context or culture may be judged abnormal by the standards and techniques of a different culture. As a result, assessment procedures developed in one culture may have little meaning in another, with the risk of exaggerating or masking culture-specific disorders (Marsella, 2009; Matsumoto & Juang, 2013). It is critical, Marsella (2009) argued, that we recognize and acknowledge the cultural and historical contexts of our views and practices. That advice is surely important in consideration of altered states of consciousness that may be useful, accepted aspects of one cultural tradition, while at the same time viewed in a very different way by those of other backgrounds.

#### Perspective on Altered States

Recent published reports on altered states of consciousness have been dominated by Western laboratory work, fueled by advances in the understanding of neuroscience and the complex world of the human brain. Yet some of the most interesting aspects of consciousness, while viewed as pathological in some cultural contexts, may have profound cultural significance in other places and other traditions. Ward (1994, p. 63), in discussing the culturally adaptive nature of altered states of consciousness, noted four of these adaptive characteristics:

- 1 Biological—The mechanisms underlying trance states have much in common with such Western psychological/psychiatric concepts as emotional catharsis.
- 2 Psychological—Ritual possession may produce contentment, feelings of wellbeing, and a sense of rejuvenation, as well as relief of psychological or physical symptoms.
- 3 Social—The experience of ritual possession can enhance community social status and may enable a variety of behaviors that would normally be inhibited by social conventions.
- 4 Socio-cultural—Altered states may serve to strengthen religious beliefs and build social bonds within a community.

Many cultural views of altered states of consciousness run counter to traditional Western scientific tradition and explanation, and the behaviors occurring in such states can seem unusual and abnormal by Western standards. Yet the psychology of the West has frequently been culture-blind (Gergen, Gulerce, Lock, & Misra (1996), overlooking its own historical and cultural conditions. Recent work (e.g., Sng, Neuberg, Varnum, & Kenrick, 2018) has called for a more unified understanding of psychological variation across cultures, including a call for increased study of cultural adaptation to ecological conditions. The experience of altered states of

consciousness, like such other phenomena as shame and death (Rosenblatt, 2010), varies widely across cultures, and can be culturally significant in numerous divergent ways.

Although the term "indigenous psychology" has often referred to so-called "native" populations, psychological scientists increasingly realize that *all* psychologies are indigenous—that is, that prevailing psychological thought is always a product of the cultural context from which it arises (Marsella, 2013). By this standard, so-called "mainstream" psychology reflects the values of the Euro-American backdrop that created and sustains it. In recognition of the fact that cultural differences may reflect the diversity of cultural goals (Kim & Park, 2005), we can easily imagine that altered states of consciousness are adaptive in differing ways across different cultures. Far from being pathological, altered states can in fact be therapeutic—and should be understood on their own terms, in their own cultural contexts (Ward, 1994).

Should the hook swingers of India, or the *Thaipusam* pilgrims of Malaysia be judged through the Western lens of normalcy/pathology? To do so without an understanding of the role played by such practices against their own cultural backdrop would of course be ethnocentric. Members of different cultures, though perhaps disagreeing on cultural values (Schwartz & Sagiv, 1995), can work to understand that the values and practices of others likely serve useful, adaptive purposes in the environments in which they emerge.

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#### Part VI

### Language and Communication

People of all cultures communicate and use language—a major similarity across people around the globe. At the same time, language also stands out as one of the most salient differences observed across cultures. Language contributes to both understanding and misunderstanding between peoples. Yet, no matter how different they may seem, all languages have in common certain key characteristics, while continuing to possess their own unique features.

Researchers have studied common communicative gestures in babies born across cultures and the development of language in children as they mature and become enculturated. Although they certainly learn through the efforts of parents and others, children also seem to learn language without formal training.

The study of language can tell us much about how people think and about how they perceive their world. And, of course, differences in thinking and perception can provide the basis for cross-cultural misunderstanding. Further, overcoming such misunderstanding may require much more than the literal translation of words from one language to another, and such subtleties as humor and metaphor may prove particularly difficult to communicate across cultures.

As the world becomes a smaller place—in terms of ease of travel and electronic exchange of information, cross-cultural communication is especially important. How we encode and decode messages is increasingly significant, particularly when we attempt to communicate with strangers and members of other groups. To aid cross-cultural communication, researchers have examined the role of various dimensions of culture, as well as such cultural features as the role of context as a contributor to communication.

Some writers have argued that nonverbal aspects of communication, in the form of gestures, intonation, and body language, may carry a larger portion of an intended message than the words embodied in language. Recognition of the role of nonverbal communication is yet another fascinating facet of our understanding of language and communication across cultures.

# Language and Culture Commonality, Variation, and Mistaken Assumptions

#### David S. Kreiner

There may be nothing more obvious about cultural differences than the variability in our languages. At the same time, perhaps there is nothing more striking about humans than our remarkable similarity in the use of this complex communication system. Language can be revealing about culture, culture can help us better understand language, and their interplay can give us insight into what it means to be human.

This chapter will examine both commonalities and differences in language across cultures. We will first explore the idea that human languages have universal properties. We will then see how similarities and differences in language across cultures may be revealing about the relation between language and thought. Finally, we will examine how both mistaken assumptions and cultural differences in language can lead to misunderstandings.

#### Do Languages Have Universal Properties?

Although there are obvious differences between languages, it is often claimed that we all communicate in essentially the same way: human language. A group of extraterrestrials observing our planet might assume that all human beings rely on the same communication system, but from our perspective as humans, we tend to notice the differences among human languages. As a result, we overlook the remarkable consistency across human languages. Hockett (1966) noted a number

of characteristics that languages share; these are often described as linguistic universals. Human language may be distinguished by these features from other systems of communication. Examples of linguistic universals include the following.

- 1 Language is discrete. Any two different sentences that we choose to compare will differ in one or more specific features. *I ate a handful of beans* differs from *I ate a mouthful of beans* in that one morpheme has changed. A morpheme is the smallest unit of language that carries meaning by itself. In this example, the two sentences are similar in every respect except for the difference between the morphemes *hand* and *mouth*. Similarly, *I ate a handful of beans* differs from *I ate a handful of beets* in only one sound. Individual speech sounds are called phonemes. Hockett (1966) compared the discreteness of language to another communication system, the dances of honeybees, which can be "indefinitely similar to one another" (p. 10).
- 2 Language is hierarchical, meaning that small units are combined into larger ones. Phonemes are combined into morphemes, which are combined into phrases, which are combined into sentences.
- 3 All human languages contain words that fall into different grammatical categories, such as nouns and verbs.
- 4 All languages provide a way to create new sentences, making the number of possible sentences in any language infinite. This creative property of language is a consequence of its discrete and hierarchical nature. Languages contain rules about how to combine discrete units. A new sentence can always be created by adding a phrase to an existing sentence.
- 5 Languages have to be acquired. In other words, they are transmitted culturally. As humans, we are not born knowing a particular language; instead, we are born with the ability to learn language based on input from the environment. Our genetic makeup provides us with the ability to learn language. For example, a honeybee cannot learn to speak French no matter how much education it receives.

Van der Hulst (2008) distinguished between language universals and language-unique universals. A property is language-unique only if it is shared by all languages but it is not shared by other phenomena. For example, the hierarchical nature of language may also describe music, in which case it could be a linguistic universal but not language-unique. Recent evidence suggests an intriguing possibility about possible origins of at least some universal properties of human languages. In some cases, apparently arbitrary language features tend to occur as statistical regularities across languages. One example is the set of color terms in a language. Baronchelli, Loreto, and Puglisi (2017) noted a similarity in which color terms exist in languages, given the number of color terms. If a language contains only two color terms, it is very likely that those terms correspond to black and white. If a language contains a third color term, it is likely to correspond to red,

and if it contains a fourth color term, it is likely to be green. Over time, languages develop different sets of color terms, but those historical processes tend to reflect similar perceptual biases.

Similarly, although languages obviously contain different vocabulary terms, similarities in the sound patterns within words occur at above chance levels. For example, syllables like *blif* are preferred over syllables like *lbif*, even when those particular syllables do not exist in a speaker's language (Berent, 2017). Roughly speaking, the preference across languages is for syllables that have fuller sounds (e.g., /b/ as opposed to /l/) toward the middle as opposed to the beginning or end of a syllable (Gomez et al., 2015). Even newborn infants show these preferences for sound patterns, indicating that experience with language cannot explain the preferences (Gomez et al., 2015).

The universality of language may extend to gestural aspects of language. McNeill (2016) made a persuasive argument that gestures are a key component of spoken language systems, complementing information communicated through the sound signal. The production of speech requires the use of gestures. Developmental evidence indicates that infants from different cultures, for example, Italian-Canadian and Japanese, are as similar in the development of their gestures as infants from more similar cultures, for example, Italian-Canadian and English-Canadian (Blake, Vitale, Osborne, & Olshansky, 2005).

The degree of similarity across human languages, combined with the relative ease with which humans acquire language, has led to the claim that human language is instinctual (Pinker, 1994). The language instinct provides us with a set of abilities that drive us to acquire and use language. The assumption is that our brains are prepared to learn a communication system that is discrete and hierarchical, contains grammatical categories, and so on. Languages differ, in this view, only in the details.

Any neurologically normal child acquires language without the need for formal training (Pinker, 1994). If there is a language in the environment, children will learn it. If individuals find themselves in an environment lacking a common language, they will invent one. Some of the clearest examples of this tendency arise from the need for deaf individuals to communicate with each other when they find themselves in an environment that lacks sign language.

The development of Nicaraguan Sign Language (NSL), as described by Senghas, Kita, and Özyürek (2004), illustrates a common pattern by which a new language comes into existence. When individuals who speak different native languages must communicate with each other, they may develop a pidgin system which allows for communication but does not have the regularity of a full language. The same process has occurred many times in history when individuals from different language backgrounds have been brought together, such as the creation of creole languages as a result of the slave trade (Baptista, 2005). Children of individuals speaking the pidgin language may regularize it into a creole, resulting in a full-fledged language characterized by the linguistic universals described above.

In the case of NSL, Senghas et al. (2004) have described how children came from different areas in Nicaragua to attend a central school for the deaf. Many of the children had developed systems of home signs that they used to communicate with their families, but these systems were idiosyncratic. The beginnings of NSL constituted a pidgin system in which the children implicitly came to agree on what particular signs represented. As new cohorts of children came to the school, they not only learned the signs, but they also regularized the grammatical system. Successive cohorts of NSL speakers changed the language, for example, by improving the ability to communicate the temporal order of events (Kocab, Senghas, & Snedeker, 2016).

Another fascinating example is Al-Sayyid Bedouin Sign Language (ABSL), a relatively new language that is still in the early stages of its development. Sandler, Meir, Padden, and Aronoff (2005) have described the development of ABSL. Many of the residents of the village of Al-Sayyid (located in Israel) are deaf due to a hereditary condition. Interestingly, the deaf individuals in the village are not treated differently from hearing individuals. Most of the hearing individuals are able to communicate with their relatives and friends using ABSL. Sandler et al.'s investigation has revealed that ABSL is developing on its own, not as a derivative of an existing language. Part of the reason for this is that Al-Sayyid is isolated from other linguistic communities. ABSL is currently in its third generation, meaning that the grandchildren of the individuals who originated the first pidgin system are now learning the language, their parents having added grammatical rules to the signs originated by their grandparents. In studying the second-generation users of ABSL, Sandler et al. demonstrated that the language contains linguistic universals, such as a preferred word order. ABSL prefers the SOV (subject-objectverb) word order, as in I the food ate. The SOV word order occurs in a number of other languages, such as Japanese, but does not occur in languages spoken in the areas surrounding Al-Sayyid. ABSL continues to evolve, as do other languages. For example, the hierarchical property of words being composed of smaller units is developing with the third generation of ABSL users. The story of ABSL is interesting in and of itself (see Fox's 2007 account), and it supports the claim of commonality across human languages.

Hockett (1966) acknowledged that linguistic universals could not be proven to be true, as all human languages cannot be studied. We do not know, for instance, whether all human languages have a preferred word order, only those that have been studied. Hockett pointed out that it would be impossible to study every language that exists in addition to every language that ever existed. The best we can do is to continue to collect information about human languages. Ultimately, we need to make inferences about the general nature of human language based on the languages that have been studied.

The usefulness of continuing to collect information is illustrated by the Pirahã language, spoken by an Amazonian culture in Brazil. Pirahã appears to lack some of the so-called universal features present in other languages that have been

studied, notably words for numbers and counting. Everett (2005) proposed that the Pirahã culture constrains the language in the sense that the Pirahã only think and communicate about immediate experience. At the request of the Pirahã, Everett and his family attempted to teach them to count in Portuguese, but they were unable to master it. Everett reports that the Pirahã are often cheated by Brazilians with whom they trade because they are unable to determine whether they are getting a good deal. Everett also points out that the Pirahã have remained monolingual despite having contact with other languages for over 200 years, suggesting that they do not pick up languages which display ways of thinking that are inconsistent with their culture.

Human languages have remarkable similarity. Languages tend to have the same basic properties, they tend to be acquired by individuals in the same way, and they tend to develop within cultures in the same way. As Hockett (1966) acknowledged, however, properties of human languages may not be universal in an absolute sense. The extent to which characteristics of human language vary across cultures can be revealing about both how we communicate with each other and how we think.

#### Language, Culture, and Thought

Although human languages have much in common with each other, they obviously are different enough that a speaker of one language may have difficulty understanding a speaker of another language. Do differences between languages reflect cultural differences in the way that we think about the world, and do similarities indicate the shared conceptions that we have of the world? Does knowing a particular language shape the way that we think? In this section, we will explore how comparing speakers of different languages can shed light on the relation between language and thought.

Benjamin Whorf proposed a widely discussed idea about the relation between thought and language (Carroll, 1956). Whorf claimed that the language we know could affect the way we think about the world. In his position as an insurance inspector, Whorf considered the possibility that the way an individual thinks about a situation could be limited by language. Whorf found that an employee in a warehouse had dropped a match into a gasoline drum. The gasoline drum had been located in an area of the warehouse that displayed a sign indicating *empty*. Whorf proposed that the employee understood the word *empty* to mean that nothing at all was inside the drum. Based on this assumption about the meaning of the word, the employee was not able to think about the possibility of flammable vapors in the drum.

Similarly, it is often stated that the Inuit language (spoken by Aleut peoples) contains many words for snow. The assumption is that speaking a language with many words for snow provides a way to think about distinctions that speakers of

other languages (with fewer words for snow) cannot. This analysis of Inuit turns out to be erroneous, as it fails to distinguish different root words from a single root word that is modified by suffixes (Martin, 1986). Nevertheless, Whorf's proposal that language limits the way we think about the world has been influential and has stimulated a great deal of research.

There is now a considerable research literature comparing speakers of languages that vary in their terms for describing colors. Languages differ widely in their use of color terms. Basic color terms refer to names of colors that are understood by all speakers of the language and are not combinations of other color terms or contained in the meaning of other terms. English has 11 basic color terms, while Russian has 12, with separate terms for light blues and dark blues. Berinmo is a language spoken in Papua New Guinea, a nation located in the South Pacific near Australia and Indonesia. Berinmo has five basic color terms, with, for example, one word that covers red, pink, and orange (Roberson, Davies, Corbett, & Vandervyver, 2005).

The Dani language of New Guinea contains only two basic color terms. The word *mola* refers to bright colors while *mili* refers to dark colors. Rosch (1973) compared speakers of Dani and English on their ability to remember seeing particular colors. Of course, Dani speakers are able to perceive differences between other colors; their language just does not contain different words for them. Within a particular color category, an individual can select a shade of that color that represents the best example; this is called a focal color. The best example of blue is the focal blue; the best example of red is the focal red; and so on. Rosch reported that English speakers and Dani speakers both displayed better memory for focal colors than for non-focal colors. Despite the fact that Dani speakers do not have separate color terms, they still demonstrated better memory for focal colors. Rosch's results were taken to contradict Whorf's hypothesis; cognition was similar across different groups despite differences in their languages.

More recent research indicates that there may in fact be language-related differences in how we think about color. Recall that the Berinmo language has five basic color terms and that these do not correspond directly to the color terms in English. Roberson, Davies, and Davidoff (2000) measured how well speakers of both Berinmo and English could learn and remember color categories. The results, for both Berinmo and English speakers, indicated that we can more easily perceive differences between colors when our language uses different color terms to label them. For example, the Berinmo word *nol* includes both blue and green. Roberson et al. (2000) found that English speakers were better at discriminating shades of blue from shades of green than they were at discriminating within blue or within green. Berinmo speakers did not show this pattern. The boundary between the Berinmo words *nol* and *wor* is within the green category for speakers of English. Roberson et al. found that Berinmo speakers were better able to distinguish shades of *nol* from shades of *wor* than shades within these two colors. English speakers did not show this pattern. The important thing about these findings is that

individuals are better able to discriminate among different colors if their language contains different words for those colors. This research is consistent with Whorf's idea that the way we think can be influenced by the structure of the language that we speak.

It appears to be the case that language can influence how we categorize colors. Whether language can actually limit what we are able to think is a different question. Roberson et al. (2005) asked speakers of several different languages to sort a set of 65 color chips so that more similar colors were grouped together. The researchers found both differences and similarities in how the colors were sorted. Speakers of languages that had separate color words for green, blue, and purple were more consistent in how they grouped those color chips than were speakers of languages that did not contain the separate color terms. However, speakers of different languages were similar in placing more importance on hue than on lightness. This similarity occurred even when the color terms in the speaker's own language emphasized lightness more than hue. A particularly interesting finding was that speakers of the same language varied on how they grouped the color chips. It is also interesting that individuals generally grouped the color chips into more categories than they had color terms in their language. These latter two points suggest that we are able to make distinctions even without having specific words to do so. Thus, results from studies on color perception present a mixed picture about the relation between a language's color terms and how speakers of the language think about color.

Differences in color terms have received a great deal of attention in language research, but languages can differ in other ways. Studies on cognition and perception as individuals learn a second language have indicated a range of changes in areas including understanding of concepts (e.g., "tight contact" of objects), perception of space, and taste perception (Bassetti & Cook, 2011).

Research on speakers of multiple languages can be revealing about the relation between language and thought in addition to comparisons of speakers of different languages. Ji, Zhang, and Nisbett (2004) pointed out that studies comparing individuals from different cultures often confound culture with language, as individuals are usually responding to questions that have been translated into their own language. This problem makes it impossible to tell whether any differences that emerge from such studies are the result of cultural differences, language differences, or both. To address this concern, Ji et al. tested bilingual individuals in both languages. Eastern cultures tend to emphasize relationships more than objects, whereas Western cultures tend to show the opposite pattern. For example, when given the words "seagull, tree, squirrel" and asked which two words go with each other, a Chinese speaker is likely to choose "tree" and "squirrel" because of the relationship between them. An English speaker is more likely to choose "seagull" and "squirrel" because they are members of the same category, "animal." Ji et al. suggest that different languages may be associated with different ways of thinking. For example, a Chinese-English bilingual may be more likely to think of

the world in terms of categories when tested in English because the English language provides cues about categories. When Chinese speakers (Mandarin or Cantonese) were tested in English, they made more categorical choices than Chinese speakers who were tested in Chinese. However, this effect did not hold for Chinese speakers from Hong Kong and Singapore, suggesting that the findings were due to differences in cultural experience rather than differences in the language in which they were tested.

Grammatical gender is another way that language might affect the way that individuals in different cultures think. In some languages, such as Spanish, nouns are categorized as belonging to the masculine or feminine gender, whereas languages such as English do not include a grammatical gender system. Does grammatical gender affect our perception of objects as being more masculine or feminine? Flaherty (2001) compared Spanish speakers and English speakers on their conception of various objects. Participants rated drawings of objects on whether they were male or female and gave them either male or female names. Grammatical gender was related to how participants classified the gender of the object for Spanish-speaking adults and older children, but not for younger Spanish-speaking children (5–7 years old). English speakers assigned gender of the objects consistently with the animate-inanimate distinction, which is the tendency in English to associate inanimate objects with the pronoun "she" and animate nouns with "he."

Similarly, Sera et al. (2002) found that speakers of French and Spanish were influenced by grammatical gender in how they assigned male or female voices to inanimate objects, but German speakers were not. German nouns are not consistently marked for grammatical gender, whereas Spanish and French nouns are consistently marked for gender. Further, Sera et al. reported that French and Spanish speakers tended to agree on gender assignment of inanimate nouns when their languages assigned them the same gender but disagreed when their languages assigned different genders to the nouns.

In another experiment, Flaherty (2001) found that Spanish speakers were more likely to classify objects according to grammatical gender than according to gender-related attributes of the objects, such as associating "big" with males and "small" with females. Perceived attributes had a stronger relation to assigned gender of the objects for younger Spanish speakers, similar to the results for English speakers. These findings suggest that, as we acquire a language, the distinctions that the language makes gradually come to influence the way that we think.

Research on the development of cognition also supports the idea that the distinctions we learn can change our perceptions. Scott and Monesson (2009) investigated the effect of learning a category on infants' ability to discriminate among individuals within a category. They asked parents to read picture books to their 6-month-old infants for 3 months. In one condition, the picture books contained individual names for six monkeys (e.g., Dario, Boris). In another condition, all six

monkey faces were simply labeled categorically as "monkey." Infants who learned the category had more difficulty discriminating among the six individual monkeys. These results suggest that the learning of categories can change the way we perceive the world.

Özyürek et al. (2008) studied how expression of motion develops in both verbal language and gestures. They compared how Turkish-speaking and English-speaking children described motion in animated movies. Manner refers to the way in which something or someone moves (e.g., walking) while path refers to the direction of the movement (e.g., up). In Turkish, manner and path are typically communicated in different verbs; thus, Turkish speakers usually express manner and path in different clauses (e.g., She ascended the hill while walking). In English, manner and path are often expressed in a single clause (e.g., She walked down the hill). Özyürek et al. found that 3-year-olds used language consistent with adult speakers of their language. English-speaking children tended to use single clauses to represent manner and path while Turkish-speaking children used multiple clauses. However, the use of gestures was similar in young children (ages 3-5). Whether they spoke English or Turkish, the children used separate gestures for manner and path. At age 9 and older, English-speaking children tended to combine manner and path into one gesture, while Turkish-speaking children continued to use separate gestures, consistent with their language. Özyürek et al. interpreted the results as evidence that gestural expression is shaped by language, reflecting language-influenced representations of motion.

We have seen that learning a language can influence the way we perceive reality. Yet, this does not capture the entirety of the relation between language and thinking. Pinker (2007) suggested that there is much to learn about the way the human mind works by examining how humans use language. Pinker argued that there are some basic and uniquely human ways of understanding the world that are reflected in language. One illustration is that the world presents a continual flow of sensory information, but the human mind breaks this flow of information into discrete units of meaning that can then be expressed in language. Pinker proposed that human thought is based on units such as objects, events, and goals. This view implies that, even though individuals and cultures can vary in their languages and the ways that they view the world, the essential machinery underneath is something we have in common.

Whorf's hypothesis is sometimes expressed as having a strong form and a weak form (Hunt & Agnoli, 1991). The strong form claims that we are not able to think about a distinction that is not made in our language. This hypothesis is untenable in the sense that we can think about a concept even if we do not have a specific word for it. We can tell the difference between two different shades of green, for example, even if our language does not include separate words for them like *wor* and *nol*. Similarly, Pirahã speakers can perform an exact matching task even though they lack words for exact numbers (Frank, Everett, Fedorenko, & Gibson, 2008).

Even in the presence of differences in cognition depending on language, we have seen that there are similarities, such as the tendency to place more importance on hue than on lightness in grouping colors.

The evidence that we have reviewed here indicates that language can affect thinking even if it does not limit what we can think about. This is consistent with the weak form of Whorf's hypothesis. We perceive the world differently depending on the categories in our language and the preferences of our cultures.

#### **Assumptions and Misunderstandings**

Ironically, our ability to communicate with each other depends on a communication system that itself shapes our perceptions of reality. Differences in ways of perceiving, thinking, and communicating can result in misunderstandings. In this final section, we will start by examining causes of misunderstanding between individuals. We will end with a few examples of misunderstandings about language in general. A better understanding of what language is and how it varies across cultures can prevent both types of problems.

A failure to communicate can be much more than an inconvenience. For example, what happens when a patient and a doctor fail to communicate accurately? Roberts, Moss, Wass, Sarangi, and Jones (2005) analyzed communication between patients and doctors in London, an environment in which many languages are spoken. Their analysis revealed misunderstandings between patients and doctors in 31% of the consultations they recorded. Two-thirds of the misunderstandings occurred with patients who had limited English language skills. The vast majority of these misunderstandings had to do directly with language issues rather than with differing cultural beliefs about health. Consider the following example: A patient from Nigeria was talking with his physician in London. The patient had been bitten by a dog, and the physician was trying to determine whether a rabies vaccination was needed for the patient. When the physician asked the patient if the dog was a stray, the patient indicated that he knew the dog's owner. Further, the patient explained that the dog's owner stated that the dog received regular veterinary care. The physician appeared satisfied with this, apparently assuming that it would not be necessary to vaccinate the patient. However, the physician failed to appreciate the culture-specific meaning of the patient's intonation. In reference to the claim that the dog received veterinary care, the patient stated, "... that's what they said" (the italicized word indicating stress). In Nigerian English, this intonation pattern signals skepticism. In contrast, a British or American English speaker would be likely to stress the verb (said) rather than the content (what) to indicate skepticism. As a result, the physician failed to understand that the patient was expressing skepticism. The patient continued to express discomfort with this interaction until the physician understood that the dog might not

have been vaccinated. Had the patient not been persistent in correcting the miscommunication, the interaction with the physician could have resulted in a serious health problem.

Another consequence of miscommunication is that immigrants may fail to obtain services to which they are entitled because of a language barrier. Kretsedemas (2005) pointed out that these difficulties in communication vary depending on both the particular immigrant group and the linguistic, ethnic, and racial backgrounds of caseworkers. In a study conducted in Florida, Kretsedemas found that Haitian clients had significantly more difficulty communicating with their caseworkers than did Hispanic clients. This resulted in delays in receiving services and the need for multiple visits in order to have an application accepted. The Haitian clients also perceived their caseworkers as more biased than did the Hispanic clients. Kretsedemas suggested that these differences might be explained by the fact that Hispanic clients had no difficulty finding Hispanic caseworkers, but Haitian clients often had caseworkers who did not speak their language.

Grice (1975) provided a useful framework for understanding how language users successfully (or unsuccessfully) communicate their intended messages. Language is not just about the sounds (or signs), morphemes, phrases, and rules of grammar. Grice outlined four maxims for successful communication of intent. The maxim of quality means that the speaker makes every effort to communicate only accurate information. A speaker who provides enough information to make his or her meaning clear, but not more information than necessary, is adhering to the maxim of quantity. By providing information that is germane to the topic being discussed, the speaker follows the maxim of relevance. Finally, by avoiding ambiguity in language, the speaker is adhering to the maxim of manner. Accurate communication depends on the listener being able to assume that the speaker is following conversational rules. For example, if a speaker is attempting to be sarcastic but the listener assumes that the speaker is following the maxim of quality, the intended meaning will be misunderstood. The meaning of "Yes, that is so true" reverses depending on whether the speaker is being indirect (violating quality) or direct (adhering to quality).

Failure to understand a conversational partner's level of directness can result in misunderstandings. Holtgraves (1997) defined conversational indirectness as a difference between sentence meaning (as determined by the words and syntax, without use of context) and the speaker's intended meaning. This may occur, for example, when a speaker phrases something so as not to hurt the listener's feelings, but intends for the listener to understand a different message. A host may say, "Please stay for tea," but the intended meaning is "It is time for you to leave." An individual who tends to speak more directly may perceive someone who speaks indirectly as being evasive, while an individual with a more indirect style may perceive a direct speaker as being rude. However, the level of directness in speech does not always correlate to level of politeness. Instead, languages can vary in both directness of requests and methods of indicating politeness (Upadhyay, 2003).

One way that conversational directness can vary is in terms of work and nonwork contexts. Directness may be the norm for informal communication between family members ("Did you bathe recently?"), while indirectness may be expected in more formal settings such as at work ("There's a great sale on body wash."). Sanchez-Burks et al. (2003) investigated the hypothesis that reliance on relational cues involved in indirect communication varies between work and non-work settings more for individuals in cultures that rely on Protestant Relational Ideology (PRI). In the PRI belief system, a focus on maintaining harmonious relationships is not appropriate in a work setting; thus, indirect communication to spare a co-worker's feelings is not emphasized. Sanchez-Burks et al. provided several types of evidence suggesting that Americans tend to show less reliance on indirect communication in work settings than in social settings, but this difference does not occur for East Asians (who do not have PRI as part of their culture). The researchers concluded that this cultural difference in communication styles has important consequences for multi-cultural or multi-national work settings. The possibility of a serious misunderstanding or social gaffe could be reduced by increasing our awareness that other individuals may not share our assumptions about the appropriate level of directness in conversation.

We should also be aware that figurative language, such as idioms and metaphors, may not translate well across languages and cultures. Sakuragi and Fuller (2003) asked college students in the U.S. and Japan to rate how easily metaphors could be translated to other languages. Both Japanese-speaking and Englishspeaking (U.S.) college students rated metaphors as less easy to translate the more they perceived a target language as different from their own. For both Japanese and English speakers, across several target languages, there was a similar pattern indicating the types of metaphors that were considered easier to translate. Generally, when the literal meaning of a metaphor is more similar to its intended figurative meaning, it is considered more likely to translate accurately into a different language. Sakuragi and Fuller found that similarity in appearance was more important than similarity in function in predicting ease of translation. For example, one item the students rated was "hurricane eye." Students who rated this metaphorical eye as similar in appearance to the eye as a literal body part were likely to indicate it would translate to a different language. If the "foot of a bridge" was rated as similar in function to the foot as a body part, that was less important in predicting how well the metaphorical phrase would translate. Although a metaphor in one language may not always translate well to another language, these results suggest that the processes used to understand metaphors may be quite similar across languages.

We have seen several ways that individuals can get mistaken ideas about what their conversational partners mean. On a broader level, mistaken ideas about language and its relation to culture can have serious social implications. One example is mistaken assumptions about differences among dialects. Consider perceptions about differences between General American English (GAE) and African American English (AAE). The two dialects display differences in

syntactic and phonological features, but such differences have been taken to indicate that AAE is simply a list of isolated features or that it is a lesser, deficient version of GAE (Pearson, Conner, & Jackson, 2013). For example, in AAE, we was is not a subject-verb agreement error; it simply reflects that the subject we has become fixed in the language, much like GAE no longer requires thou goest instead of you go (Pearson et al., 2013). In some cases, syntactic constructions in AAE make distinctions that are absent in GAE, such as using be to indicate a continuing action, as when "Sara be workin'" indicates that the Sara is employed, not that she is working right at the moment. Nevertheless, speakers of AAE may be stigmatized as lazy or as lacking linguistic competence.

Another assumption we may make is that language systems that differ significantly must be learned in very different ways. One obvious difference is in the writing systems used in different languages. Some languages, such as English, rely on writing systems that are largely phonetic; written characters represent sounds. Chinese is written using characters that are largely ideographic; symbols represent words or morphemes. Given the dramatic differences in what must be learned in order to read using these different systems, we might expect substantial differences in learning how to read. McBride-Chang and Kail (2002) compared reading acquisition by students learning to read Cantonese or English. The children learning Cantonese (in Hong Kong) were in a very different cultural setting than the children learning English (in the U.S.). One important difference is that children in Hong Kong begin learning to read several years before children in the U.S. typically begin. Another important difference is in methods of reading instruction. Children in Hong Kong are taught to read by sight, associating characters with the words they represent. Most children in the U.S. are taught to read primarily with phonics instruction, learning which letters represent which sounds. Further, children in Hong Kong schools learn English and Mandarin in addition to Cantonese, while children in U.S. schools rarely receive foreign language instruction in the early grades. Surprisingly, McBride-Chang and Kail found that predictors of early reading were quite similar between children learning English and children learning Cantonese. For example, phonological awareness (knowledge of the sound structure of the language) was highly predictive of the ability to recognize words or characters in both groups. Visual processing ability was not very predictive of reading ability in either group. Thus, we should not assume that learning processes must be different just because language systems differ on the surface.

Increased awareness of cultural variability can prevent misunderstandings. Bell (2007) examined the use of humor in conversations between native and non-native speakers of English. Both native and non-native speakers made adjustments in their use of language. For example, both parties tended to avoid controversial topics. Native speakers tried to avoid idioms and other usages that they thought might be difficult for their non-native conversational partners to understand. Similarly, non-native speakers avoided using jokes that they thought would not translate well into English. Although native speakers of a language may perceive non-native speakers to be less competent, there may be an advantage of being

perceived as a non-native speaker. Listeners who heard sentences produced with a foreign-sounding accent tended to make more inferences about plausible meanings the speakers may have intended (Gibson et al., 2017).

To conclude the final section of this chapter, we will consider how cultural differences are important in language research. Knowledge that we gain on both the individual and scientific levels is not culture-free. Often it is necessary for researchers to translate a questionnaire from its original language into one or more other languages. How does the researcher know that the instrument will maintain reliability and validity after being translated? Cha, Kim, and Erlen (2007) described different solutions to this dilemma. The most common solution is the use of backtranslation. In this method, an individual who speaks both languages translates the items on a questionnaire to the target language. Then, another bilingual individual translates the items back to the original language. The original and back-translated versions are then compared. If any of the back-translated items do not match with the original items in concept, then another bilingual individual translates the items. Cha et al. pointed out that it is difficult to predict how many translators will be needed in order to complete this process. Further, it may be difficult to locate enough translators who are sufficiently knowledgeable about both the research and the cultures involved. Cha et al. used a combined approach to translate instruments from English to Korean. Their method included having the instruments translated to Korean and back-translated to English. The process also included a review of the back-translated instruments by monolingual individuals who were knowledgeable about the content of the instruments. They noted a number of translation difficulties that can occur. One example is that a word may exist in one language but not another. An item on the English version of an instrument contained the word "party," but there is no corresponding word in Korean. The translators resolved this by using a combination of words in Korean. Cha et al. also pointed out that it can be very difficult to translate an idiom. They recommended that scale developers avoid the use of idiomatic expressions. Note that the researcher who develops the scale must anticipate possible cross-cultural use in order for this advice to be useful.

The failure to take into account different experiences can produce misleading assumptions about group differences. Bartoshuk, Fast, and Snyder (2005) highlighted the problem of making sensory or hedonic comparisons across groups. When asked to rate the intensity of a stimulus or their liking for something, individuals' ratings depend on the anchors used on the rating scale. Because the meaning of these anchors can vary based on one's experiences, comparison of the ratings across groups can be misleading. For example, suppose respondents rate an experience of pain from 0 (none at all) to 100 (strongest imaginable pain). If two groups (say, men and women) differ on their numerical responses, it may be interpreted as meaning that one group experiences the same stimulus as being more painful than does the other group. But as Bartoshuk et al. explained, this misses the fact that the groups are likely to differ on how they interpret the anchors of the

scale. If the two groups differ in their experiences, then the "strongest imaginable pain" could be quite different for one group than for the other. Thus, a research finding indicating a group difference in sensory judgments may be misleading. The same issue can occur outside the context of research whenever two individuals are communicating. When we anchor our judgments in different experiences, we may think we are talking about the same thing even though we are not.

#### Conclusion

We began this chapter with an examination of the idea that human languages have universal properties. Although it is not possible to prove that all human languages share a particular feature, the evidence for commonality is quite strong. Despite variability across human languages, they have much in common. One of the central lessons about language is that the important similarities are not always obvious on the surface.

We have learned that language can affect the way we perceive each other and the world around us. The way we carve up the world in different categories is, to some extent, related to the language that we know. We saw this pattern with color terms, grammatical gender, and ideas about motion. It is important that we distinguish between differences in the *ability* to think about certain distinctions and differences in our *habits* of thinking. For example, we have the ability to think about color categories even when we do not habitually make those distinctions in our language.

In the same way, an awareness of how our assumptions can differ from those of others can help us avoid misunderstandings. We have discussed examples of cultural differences in directness, figurative language, and humor. We have seen how mistaken assumptions can affect our ability to obtain services, our views of people who speak differently, and the meaning of research results. The good news is that we also have the flexibility to make adjustments in our language use and in our assumptions about the language use of others. Our shared capacity for flexible thinking opens the door to understanding other cultures.

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# Crossing Boundaries Cross-Cultural Communication

#### Leeva C. Chung

In our quest to stabilize the global economy amid fast and furious advances in technology, the world is becoming islands of intersecting webs and virtual platforms. We find ourselves having increased contact with people who appear to be different from ourselves, whether face to face or on social media. Transiting across borders or moving from one space to another, we may find more diversity and cultural values in flux. Now more than ever, we face the daily challenge to communicate effectively with individuals who may have little, if anything, in common with us.

The study of cross-cultural communication is the study of communication involving, to varying degrees, cultural group membership differences. It is about acquiring the necessary tools and skills to manage such differences appropriately and effectively in ways that make sense to us. It is also about developing an alternative lens to experience interactions without rigid biases. On a practical level, there are many reasons to understand the role of culture in our basic communication encounters, even if we decide not to travel beyond national borders. Within the U.S., cultural diversity is a part of our everyday experience, and is especially critical for several reasons. For example, in school and in the workplace, it is inevitable that students and employees from dissimilar cultures are in constant contact with one another. Our ability to value different approaches to problem solving and mindfully move away from traditional "either/or" binary thinking about groups can create and expand diverse options in managing intercultural problems. According to creativity research (e.g., Sternberg, 1999), we learn more from people who are different from us than from those who are similar to us.

The picture of a simple life with "like-minded" similar people is no longer accurate, wherever you call home. In what was once a homogeneous community, we may now find more diversity and cultural values in flux. In the U.S., for example, census projections suggest that racial and ethnic minorities between the ages of 18 and 34 will become the majority by the year 2039. Another current phenomenon is the nearly ubiquitous presence of social media and smartphones in our daily lives, which has transformed the ways in which we interact, form relationships, and communicate online domestically and globally. Anderson and Jiang (2018) found that 95% of teens not only own smartphones, but also report being constantly online. In comparison, 85% of Gen Xers, 67% of Baby Boomers, and 30% of the Silent Generation (ages 73–90) own smartphones (Jiang, 2018).

One result has been a dramatic increase in mobile dating apps and smartphones that has transformed how we connect with others and establish romantic relationships. Recent research includes some intriguing findings; more than 59% of US Americans believe that online dating is a good way to meet others (Smith & Anderson, 2016), one-third of marriages start from an online platform (Cacioppo, Cacioppo, Gonzaga, Ogburn, & VanderWeel, 2013), online dating is a fast, efficient way for couples to meet (Rosenfeld & Thomas, 2012), and married couples who meet online have lower rates of marital breakup than those who meet traditionally (Ortega & Hergovich, 2017). Match.com has 23.5 million users, and a quarter of those who date online are millennials (Anderson & Jiang, 2018). And given a dramatic rise in cross-cultural marriages and children, intimate relationships are a fertile ground for cultural bumps and clashes.

Taking this all into account, the boundaries that shape how we perceive others and how we value culturally intact groups change. The boundaries that mark whom we include and exclude become pivotal as we try to understand how to get along in a diverse world. With such rich layers of domestic and global cultural issues, we need an alternative perspective to understand our complex interactions. This chapter will explore the necessity to study cross-cultural communication in our twenty-first century global world. As we move across physical and emotional borders, how do we learn to negotiate our communication, culture, and identity in a cross-cultural context, and how can we understand the logic that motivates our actions or behaviors?

#### Communication, Culture, and Cross-Cultural Communication

I am often asked: What do cross-cultural/intercultural communication scholars investigate? And how is this similar to cross-cultural psychology? To attempt to answer this question, I will begin by defining communication, culture, and

cross-cultural communication. Then I will highlight shared research concepts and summarize cross-cultural communication theories.

#### Communication and Culture

To think about communicating effectively with those who are culturally different, we must understand the major characteristics that make up the process of communication. Both culture and communication reciprocally influence one another. Culture is created, passed down, and adapted from one generation to the next. To distinguish between the characteristics of culture and communication, we will discuss the complex relation between them.

The concept *communication* is dynamic and subject to multifaceted interpretations. Although there are many working definitions of communication, Griffin, Ledbetter, and Sparks (2014) perhaps best described it, as the relational process of creating and interpreting messages that elicit some form of response. Thus, messages are the core of communication. In any communication encounter, we use verbal and nonverbal messages to get our ideas across to each other. We can exchange messages, but we cannot exchange meanings. No two people will interpret a message in the same way because of our unique lived experience (Gudykunst, 1994). Communication is a symbolic exchange process between two individuals who attempt to accomplish shared meanings.

With many existing definitions of culture (see, e.g., Chapter 1 in this volume), it is safe to say that *culture* is an elastic concept that takes on multiple layers of meaning. Culture is basically a learned system of meanings that helps us to make sense, or explain, what is going on around us. Individuals within a cultural group share complex patterns of traditions, beliefs, values, norms, meanings, and symbols that are passed on from one generation to the next and are shared to varying degrees by interacting members of a community (Ting-Toomey, 1999). Culture can be compared to an iceberg: the deep invisible layers (e.g., traditions, beliefs, values) are hidden but have a direct influence on our behavior. It is the uppermost layers of cultural artifacts (e.g., fashion, language, pop music) that we typically learn about another culture.

To understand what culture does for us, Ting-Toomey (1999) summarized three functions of culture that appear to be critical: (a) culture gives us a frame of reference to understand who we are, which is an identity meaning function; (b) culture satisfies our need for membership affiliation and belonging, which is the need for group inclusion; and (c) culture shapes our attitudes toward in- and out-group members. These three functions serve as an invisible cultural boundary—a particular sense of shared identity and solidarity among group members, reinforcing the boundary of "we" as an in-group, and "dissimilar others" as belonging to distant out-groups. At the same time, culture can also foster exclusive

boundaries within the group; individual group members may feel ostracized by the cultural in-group and be cast as out-group members. Communication serves as an intricate piece of the cultural puzzle, linking these various needs and processes together.

#### Cross-Cultural Communication

Cross-cultural communication involves comparisons of communication across cultural groups rather than between individuals within particular cultural groups (Gudykunst, 2002). Our communication interactions affect and influence our behavior with strangers. While considering cross-cultural communication, it is important to include both global and domestic/local comparisons. More importantly, it is critical that we conceptualize the use of culture as a frame to understand our behavior and our messages, and their impact and influence in shaping our interactions. For example, cultural groups may approach decision-making or nonverbal gestures differently. They may develop friendships and romantic relationships with different, mismatched expectations and speed, or have different communication desires, goals, and motivation. Although a successful cross-cultural encounter encourages a competent approach and a healthy outlook, difficulties emerge from the residue of behaviors, ideas, and beliefs that are comfortable and considered to be proper or "the right way" (Brislin, 1981). For example, even with people who want to have intercultural interactions (i.e., have positive attitudes), there are intercultural communication difficulties to overcome (e.g., in a high-context situation, where I am supposed to be very sensitive to subtle situational cues, but I may not have been socialized this way in my low-context culture).

Putting this all together, cross-cultural communication scholars and researchers are fundamentally trying to determine how we can be flexible, competent communicators when we interact with cultural strangers. This is no easy task, a bit like learning how to dance. During our cross-cultural encounters, we may step on people's toes, feel out of sync, or have mismatched ideas about our own ethnocentric viewpoint. With time and struggle, we learn to observe how to act appropriately, flow in our encounters, and adjust our perspective. Thankfully, culture is not a static web. It is a dynamic, evolutionary process. Similarly, human beings are not static individuals—we change. In learning about another culture, or about dissimilar groups, we can expand our ways of thinking and find new insights to strengthen our own identity.

Anthropologist Edward T. Hall (1959) put it best: communication *is* culture and culture *is* communication. Communication is central to the definition of our cultural experience. Investigating the comparative nature of the communicative process is at the core of cross-cultural communication. But what makes cross-cultural

communication and cross-cultural psychology similar and different? Are these two mutually exclusive fields of study? Let's examine how we share our research sandbox and draw boundaries in this field of study.

#### Sharing the Sandbox

Cross-cultural psychology and communication researchers share very similar contemporary elements, despite inhabiting two different fields of study. While communication scholars focus on behavior and interaction among cultural strangers, psychologists acknowledge the influence of culture on the behavior of an individual. Contemporary research examines cultural similarities and differences using cultural-level and/or individual-level dimensions. There are two central aspects of cultures frequently discussed in cross-cultural communication and psychology research: general and specific cultural value comparisons.

Many cross-cultural researchers have identified Hofstede's (1980) cultural value dimensions of individualism–collectivism (IC), power distance (PD), uncertainty avoidance (UA), and masculinity-feminism (MA) as useful general comparative cultural constructs. IC appears to be the major dimension of cultural variability used to explain similarities and differences across cultural groups (Triandis, 1988). The strength of this dimension lies in the fact that it possesses the "clearest individual-level equivalents in cultural level tendencies" (Gudykunst & Kim, 1997, p. 56). While individualistic cultures, such as the United Kingdom, emphasize individual goals, collectivistic cultures, such as Guatemala, stress the primacy of group goals over individual preferences. As a result of this value dimension, important relationships and connections have emerged:

- the importance of measuring in-group versus out-group boundary comparisons (Tajfel, 1978);
- identifying high- versus low-context communication patterns (Hall, 1976);
- expanding individual personality variables such as idiocentrism and allocentrism to advance individualism versus collectivism (Triandis, Leung, Villareal, & Clack, 1985);
- incorporating interdependent versus independent self-construals (Markus & Kitayama, 1991) to explain a wide variety of communication phenomena.

As you can see, the IC dimension provides a potentially rich explanatory framework for understanding similarities and differences in cross-cultural studies by extending the frame of a simple continuum. Hofstede's (1980) other dimensions (i.e., PD, UA, and MA) also provide similar continua by which to analyze cultural phenomena. Thus, researchers have treated culture as a central construct to explain how communication varies across and between cultural groups. Despite problems

and criticisms associated with Hofstede's conceptualization, these dimensions can be useful when monitored carefully as an individual assessment rather than generalized large group comparisons.

#### Dotted Lines in the Sand

Currently, there is a plethora of cross-cultural communication research attempting to explain cultural-level and/or individual-level differences in language, relational attraction, emotions, perceptions, identity, nonverbal communication, conflict, and intergroup behavior (to name a few), that have contributed to the growth of the field of communication. Gudykunst and Lee (2002) have summarized some of the contemporary theories as follows:

- 1 Gudykunst's (1995) anxiety/uncertainty management theory (AUM) explains the importance of information-seeking behavior to reduce our anxiety and uncertainty when we interact with cultural strangers. Effective communication only occurs when we can mindfully manage our anxiety and uncertainty.
- 2 Ting-Toomey's (1988, 2004) face negotiation theory (FNT) provides us with a general framework to understand how we manage face and conflict situations as a result of our cultural differences in norms and values. *Face* is the respect for identity issues during an interaction or the emotional significance we attach to our own worth and the self-worth of others (Ting-Toomey, 2004). *Facework* is the verbal and nonverbal strategies we use to maintain, defend, or upgrade our self-image and attack or defend (or "save") the images of others.
- 3 Burgoon's (1995) expectancy violations theory (EVT) refers to expectations we have of ourselves and others when we cross cultural boundaries. Violations occur when our expectations become discrepant from our initial anticipations and give us pause (e.g., personal space violations) and arousal. In addition, communicator valence refers to whether we perceive interaction with a particular communicator as rewarding or costly. Burgoon (1995) suggested that the concept of communication expectancy is a universal one, including the meanings, tolerable range, and evaluations (positive–negative valence) of our expectancy violations.
- 4 Gallois, Giles, Jones, Cargile, and Ota (1995) proposed communication accommodation theory (CAT), a theory of what happens during interactions with different groups by focusing on the language, nonverbal behavior, and para-language we use in conversation. When two people from different ethnic or cultural groups interact, they tend to accommodate each other in the way they speak in order to gain the other's approval. Gallois et al. contrasted two strategies—convergence and divergence—that we use when interacting with in- and outgroup members. Convergence occurs when the individual adapts his or her

communication behavior in such a way as to become more similar to the other person. Divergence accentuates the differences between oneself and another.

This is a brief summary of what we know about explaining cross-cultural similarities and differences in communication across cultural groups. Research in cross-cultural communication is exciting, flourishing, and popular. But as we move forward, there are some obstacles and challenges cross-cultural researchers must face.

#### **Challenges in Cross-Cultural Communication Research**

According to Levine, Park, and Kirschbaum (2007), three areas will be challenging for future cross-cultural research: theory, definition, and situational contexts. Although investigators use the cross-cultural theories sampled above in current research, Levine and colleagues believe there are persisting problems in using the IC (and other related constructs) dimension in research. The reliance on this one dimension to characterize distinct cultural groups limits the scope of inquiry. The IC dimension can explain some, but not all communication attitudes and behaviors. Kim (2001) argued that this conceptualization can lead to dangerous categorizations. Presenting cultures in either/or terms can lead to grave misunderstandings in research and analysis. As a result, we can safely say this area is ready for new perspectives and new theory.

Second, Levine et al. (2007) argued that as we compare and contrast communication patterns between different cultural groups, the findings do not always predict what happens when interaction takes place between individuals. Culture is typically viewed as a collective framework. In research, the individual may or may not be the most meaningful unit in cross-cultural comparisons. Culture gives us commonality and belonging within the group, but not necessarily with other individuals. But shared cultural knowledge is impossible to determine, given that culture is shared to varying degrees by individual group members. As mentioned above, a culture gives us a shared sense of identity and belonging. Looking at *individual* accounts of in-group membership and identity may provide the added explanatory strength to determine what happens during interaction.

Finally, communication does not take place in a vacuum, but in a context. Crosscultural researchers need to investigate specific situational and/or relational contexts rather than being uniform in agreement that culture is the main influence. Thus, questions like "In what situation is preference for direct communication favored over indirect styles?" are more careful (and precise) than implying "Culture X prefers direct communication over indirect styles."

These points raise some very intriguing issues for researchers, and the implication is simple. As changing demographics are widespread and accelerated, we are all crossing boundaries and shifting identities. Whether through marriage, immigration, adoption, or work, individuals can no longer claim a monocultural communication or cultural behavior pattern. Sharing space and language results in shared identity space. Collectivistic individuals may find compatible behavioral patterns among fellow individualistic workers; or individualistic low-context communicators may adopt more high-context frames with relational partners. Thus, our measurements are in need of updating and framing at the level of the individual.

Cross-cultural research in communication presents some special challenges as we share and negotiate our boundaries. Specifically, crossing boundaries of culture, communication, and identity presents a new frame or lens to understand our cross-cultural encounters. In the final section, fleshing out the intersection of these three components raises two important questions: (a) How does the relationship among culture, communication, and identity play out? and (b) What are the research implications?

## The Intersection of Communication, Culture, and Ethnic Identity

Viewing cultural variation based on group membership is an important concern because individuals born into cultural groups are generally characterized as ingroup members. Research has shown that individuals tend to see themselves in light of their respective cultural group membership (Brewer, 1997; Miller & Brewer, 1984). But what are we doing with out-group members? How do we address intact cultural individuals who have been cast aside and *perceived* as out-group members?

#### Who Are You?

Much social science research has studied how our identities affect us during the lifespan. We all have a complete image of our *self* that is an outcome of the interactions we have within our social environment. Significant people within their social world influence how individuals come to view who they are. Personal identity is a theory of self that is formed and maintained through actual or imagined agreement (Schlenker, 1985). How we see ourselves is shaped and molded by the feedback we receive from others (Mead, 1934).

Although culture plays the larger role in shaping our view of ourselves, it is through multiple channels that we acquire and develop our own values, norms, and baseline for behavior in our lives. For example, our families pass on values and norms from one generation to the next. Parents teach their children the difference between right and wrong, acceptable and unacceptable ways of behaving, through the language they use and through role modeling these actions. During their early years, children internalize what to value and devalue, what to appreciate and reject, and which goals are important in their culture, through the influence of their family system and via pervasive messages from popular culture and contemporary media.

It is through the pervasive cultural value patterns—as filtered through the family and media systems—that meanings and values of identity are differentiated and defined (Moran & Chung, 2008). We all have identity goals, which refer to our need for respect/disrespect or approval/disapproval when interacting with others. Self-identification provides the motivational key to communicative actions. How we conceive our sense of self and how we want to be perceived by others are fundamental communicative questions. It is through communication that we can reframe and modify our self-views, in a continuous cycle of negotiation.

#### One Day You're IN, the Next, OUT

We all have primary personal identities that include any unique attributes that we associate with our self in comparison with those of others. Groups play a significant role in the development of self, and as individuals support their social identities by acquiring group memberships, the salience and formation of cultural identity are integral. Development of identity does not occur in the same manner across societal boundaries. Thus, how an individual expresses his/her identity may be vastly different in India than in Cuba. One may emphasize the integration of an individualized identity or more collectivistic/familial connection. The cultural and ethnic identities acquired during childhood and the adolescent years influence with whom we associate, the food we eat, the language or dialect we speak, and the nonverbal styles we are at ease with in communicating with others. In being aware of our multifaceted self-concept, it is important that we gain a deeper awareness of the complex, multifaceted identities of culturally different others. Ethnic identity is one such fact that intersects with culture and communication.

Multicultural individuals are increasing in numerical proportion and live on the border between two or more cultural groups (Martin & Nakayama, 2009). Across social science disciplines, researchers are determined to understand the persistence of ethnic identities in countries with a variety of ethnic groups with strong, dominant identities. Throughout much of the history of the U.S., the country has been compared to a melting pot (Zangwill, 1909) where immigrants were assumed to blend and melt into the society, encouraging a process of Americanization (Glazer, 1997; Gordon, 1964). However, ethnic individuals have consistently embraced, adopted, and formed ethnic identities despite integration pressures

within the society. The melting pot metaphor suggests a type of conformity and a reminder of the difficulty many groups have had assimilating into the society; many individuals have continued to embrace an ethnic identity despite the pressure to assimilate. We negotiate and renegotiate our individual identities among in-group and out-group members. Brewer's social identity complexity theory (2010) outlines three patterns that individuals choose:

- 1 The intersection pattern refers to a compound identity in which two (or more) social membership categories (e.g., female Syrian professor) can be crossed to form a compound, singular social identity. Individuals with compound, singular identities feel most connected with others who share compound identity experiences.
- 2 *The dominance pattern* demonstrates how an individual adopts one dominant social identity (e.g., professor) and subordinates or embeds the others (e.g., female and Syrian).
- 3 *Compartmentalization* is the way an individual adopts one social identity category as the primary basis of identification in one setting and shifts to another in a different context (e.g., being a supportive sister at home).

Defining ethnic identity is no doubt problematic across several disciplines. Although there are hundreds of definitions of ethnic identity, Alba (1990) provided a strong definition, proposing that ethnic identity is "inherently a matter of ancestry, of beliefs about the origins of one's forebears" (p. 37). The dominant society is a major force influencing the components of ethnic identity (Sue, Mak, & Sue, 1998). How does one develop a sense of ethnic identity? A developing sense of personal and social identity can be combined into development of an ethnic identity. According to Phinney (1992), there are three areas of identity construction: affect, cognition, and behaviors. Affect describes the labels we use to self-identify, our sense of belonging, being in the in-group, and feeling content as a member of the group. Cognition comprises the history and knowledge of the group. Finally, behaviors include group involvement and the practice of celebrating group membership, although an individual associated with a particular ethnic group may not actually behave in accordance with her or his ethnic norms or behaviors. In other words, skin color or other ethnic traits do not automatically guarantee ethnic ingroup membership. In the U.S., although ethnic minorities strive hard to be "Americans," they are constantly reminded by the media or in actual interactions that they may not belong to the larger U.S. society.

Ethnic identity can be sustained by shared characteristics, such as language or religion. It is also a subjective sense of "in-groupness," as individuals perceive themselves and each other as members of the same in-group through shared historical and emotional ties. However, for many ethnic minority group members living in the larger U.S. society, a constant struggle exists between perception of their own ethnic identity and the perception of others' questioning of their ethnic

heritage or role. Often, this results in a sense of both ethnic and cultural identity crisis. By understanding how we define ourselves and how others define themselves ethnically and culturally, we can communicate with more cultural sensitivity and understanding.

Realizing that ethnic group membership does not necessarily correspond to cultural group membership and identification with the dominant group can help explain what makes the group "common" and what separates one ethnic group from others. We cannot assume that all individuals in an ethnic group will share a single, common identification when group culture is rich in linguistic and religious diversity. Ethnic identity appears to have subjective and objective layers. I will briefly summarize how cross-cultural psychologists and communication scholars approach ethnic identity.

First, ethnic identity can be viewed as a sense of group membership based on shared political and economic conditions. A popular theme in this literature holds that positive group interaction is an essential component of ethnic identity. This idea incorporates both sociological and psychological perspectives, including theories of assimilation (Gordon, 1964), acculturation (Berry, 1980), and social identity (Tajfel, 1974). Second, ethnic identity has been addressed in a developmental model. In this perspective, identity transformation occurs throughout the lifespan of an individual and is based on experiences of ethnic discovery (see Cross, 1991; Parham & Helms, 1985). Third, the process of identity formation is concerned with how individuals understand the implications of their ethnic identity (Erikson, 1968; Phinney, 1989). Finally, communication has been linked with ethnic identity as an outcome of adaptation (Kim, 1988) and negotiation within the individual and among ethnic group members (Ting-Toomey, 1993). These two communication theories (adaptation and negotiation) are important to explore further because how we view ourselves inversely affects how we communicate with others.

#### Adaptation and Identity

As more minorities cross boundaries, one outcome of successful adaptation is an intercultural identity (Kim, 1995). By combining psychological (affective, behavioral, and cognitive), social (interpersonal and mass communication), and environmental explanations, we can explain the stress–adaptation–growth process of an individual. The social and psychological dimensions of adaptation are different but interrelated facets of cross-cultural adaptation. Identity is dynamic and evolving. Kim (1988, 1995) argued that during the process of adaptation, stress is an underlying factor motivating an individual to make the necessary adjustments to find some form of balance. The degree of intercultural development influences an individual's capacity to function in a multicultural society by undergoing the struggle to manage the stress, the need to successfully adapt, and the maintenance of

ethnic identity distinctiveness. The result is an intercultural identity, defined as an increase in the individual's capacity to integrate conflicting cultural demands into a cohesive new whole (Kim, 1995).

Identity has universalized and individualized orientations: universalized to transcend the ascribed cultural parameters, and individualized as the self–other orientation becomes more particularized and personalized (Kim, 2001). Although most social scientists have devoted time to drawing boundaries between ethnic group memberships, emphasis should be placed on merging boundaries without the need to lock oneself in a single identity (Kim, 1995). In essence, an individual who expands his/her identity by incorporating new cultural elements should not be perceived as a disloyal ethnic group member. Rather, the merging of ethnic boundaries is perceived as a matter of personal necessity and value for the ethnic individual.

#### **Identity Negotiation**

Ting-Toomey (1993) developed a theory of identity negotiation, drawing on social identity theory (Tajfel & Turner, 1979), acculturation theory (Berry, Kim, Power, Young, & Bujaki, 1989), and racial identity development scales (Cross, 1991; Helms, 1990). Ting-Toomey viewed ethnic identity as a multidimensional construct including aspects of personal and collective self-concept, affiliation with in-group and outgroup members, attitudes, and feelings. According to Ting-Toomey, humans have universal needs for security and inclusion. Ethnic identity represents a contradictory state between a sense of group belonging and a sense of wanting to become separate from the group, which accounts for group inclusion or differentiation.

The contradictory state takes the form of a dialectical tension, which is "the simultaneous presence of two relational forces that are interdependent and mutually negating. Their interdependence is evident in that the forces define each other" (Montgomery, 1992, p. 207). Thus, the ultimate challenge for an individual is to find the balance between both states. This tension, between in-group membership and individuality, is anchored in the daily life and social practices of ethnic individuals.

What the adaptation and negotiation theories have in common is that membership in an in-group is a matter of degree and variation. If norms, values, and social relationships within an in-group influence the communication patterns of group members, the influence should depend on the extent to which one shares the group's norms (Kim, 1988). Admission to the in-group and acceptance by the in-group, on the basis of shared norms and values, are interrelated: The more an individual associates with the in-group, the greater the conformity that is expected and reinforced. At the same time, if the in-group does not approve of an individual's behavior, it can reject the in-group member. Because of this variation in conformity among in-group members, the boundary lines of in-group and outgroup are sometimes blurred. Although our in-groups offer us a sense of belonging and security, they also have the power to reject us.

The process of identity formation is concerned with how individuals understand the implications of their ethnic identity. We communicate who we are on a daily basis. Our identities have a profound influence on when we feel secure, when we are at our most vulnerable, and when we feel obligated to mask our authentic self. We struggle with and against our identity. But how can we connect identity with a cross-cultural frame? The distinction between cultural variability and ethnic identity salience is clear. The social construction of the self may be the determining factor in understanding the context of cultural differences. By using the identity pulls of security–vulnerability and inclusion–differentiation, we can understand that it is not easy to neatly fit into an in- or out-status.

# **Implications in Cross-Cultural Communication**

The intersection and boundaries of identity, communication and culture are dynamic and constantly transformed to fit the needs of individuals in complex settings. The situational nature of identity challenges cross-cultural communication scholars to understand the impact of prescribing a general "group membership" ethnic identity which is not the ascribed self-identity. The other challenge is to find the behavioral cues associated with in-group or out-group status during an interaction with a member of the same ethnic group, and how the individual perceives these cues.

The importance of the behavioral cues associated with out-group perception during interaction may help address our differences in getting together, and explain why we have different goals, values, proxemics, and needs during conversations. More importantly, fleshing out our behavioral cues can be a major contributor to a successful or failed cross-cultural encounter.

# Language Rules

Language plays a key role in cross-cultural communication. Language is closely tied to our claimed identity. We use language to agree or disagree with people, to offer or decline requests, enforce goals, and defuse tension. Language frames our perceptions and interpretations of everyday events happening around us; it is a taken-for-granted aspect of our life. We acquire meanings for words (e.g., collaboration, peace) or phrases (e.g., deal with it) via the value systems of our culture. Though language can easily create misunderstandings, it can also clarify misunderstandings and minimize tense moments.

Around the globe, languages are constructed with words or symbols that are arranged in patterned ways and governed by a set of rules. The semantic rules of language are based on the meaning we attach to words. Words do not have

self-evident meanings. Humans consensually establish shared meanings for specific words and phrases. For example, *hot* has a feature of temperature, and *mess* has a feature of organization. If we combine hot with mess as *hot mess* the concept takes on a whole range of different meanings. Beyond using vocabulary, we need to apply the appropriate cultural meaning features that are indicated by different word pairings. Without such cultural knowledge, we may have the right vocabulary but an inappropriate meaning association system.

Another important component of language is pragmatics. Pragmatics of a language refers to the contextual rules that govern language usage in a particular culture. Pragmatics concerns the rules of how to say what, to whom, and under what situational conditions, in a speech community (Hymes, 1972). These rules of language give rise to the diverse functions of languages across cultures and answer the question of why language plays such a critical role within each culture. Language is an integral part of both a sense of identity and the mindset that goes with it.

For example, think about how you want to persuade your boss to allow you to take a week off. Cross-culturally, there are at least two modes you can choose from. The first is called the *self-enhancement* mode. This mode focuses on boasting about one's credentials, accomplishments, and special achievements and abilities. In Switzerland and the U.S., encouraging individuals to sell themselves and highlight their achievements during a job interview is an example of self-enhancement. On the other hand, the *self-effacing* verbal mode emphasizes the importance of modest talk, hesitant speech, and the use of self-deprecation concerning one's effort or performance. The self-humbling mode is a fundamental part of the Puerto Rican verbal style. In your request for a week off, which do you choose? Who could understand what a self-effacing individual wanted? Research indicates that in many Latin, Native American, and Asian cultures, individuals believe that if their performance is good, or if time off is needed, others will notice. However, from the Western cultural standpoint, if their performance is good, or time off is needed, individuals should document or be direct so that those in charge will be sure to take notice.

Thus, language rules during an interaction are about much more than what words are spoken: it is the *way* words are spoken that plays an enormous role in how a cross-cultural encounter unfolds, possibly resulting in mismatched expectations, assumptions, and/or stereotypes. How language interacts with our nonverbal behavior adds an additional factor to our discussion of the intersection of culture, identity, and communication.

#### Nonverbal Communication

Nonverbal communication is a powerful form of human expression. It is all around us. Nonverbal messages are often the primary means of signaling our emotions, attitudes, and the status of our relationships with others. Although our

communication with others consists of verbal messages, nonverbal communication is equally important as verbal communication (Andersen, 2008). Many nonverbal experts estimate that in every encounter, nonverbal channels convey about 60–65% of the message. Nonverbal messages signify who we are, based on what we wear, how we speak, and how we present ourselves. Nonverbal communication is both a conscious and an unconscious aspect of our everyday life. We can communicate with people without speaking a word, intentionally or not. Because nonverbal communication occurs with or without verbal messages, nonverbal messages provide the context for how an accompanying verbal message should be interpreted and understood. They can either create confusion or clarify communication. Often, nonverbal messages can create cross-cultural friction and miscommunication because (a) the same nonverbal signal can mean different things to different people in different cultures; (b) we often send multiple nonverbal cues; and (c) there are many display rule variations to consider, such as personality, gender, relational distance, socioeconomic status, and situation.

Our culture shapes the display rules for when, where, with whom, and how different emotions should be expressed or suppressed. Nonverbal cues are the markers of our identities. The way we dress, the way we talk, and our nonverbal gestures, all tell something about who we are and how we want to be viewed. We rely on nonverbal cues as our "name badge" to identify which group we belong to and what groups we are *not* members of. Our accent, posture, and hand gestures further reveal our group membership. Many misunderstandings occur when we try to infer the meaning behind nonverbal codes, especially with someone who is from a different culture. Decoding nonverbal messages with 100% accuracy is like making predictions about who will win the Super Bowl—before the season starts.

Nonverbal communication includes a wide variety of behaviors, including the study of *kinesics* (facial expressions, posture, and body movement), *proxemics* (space), *vocalics* (silence and the meaning behind how we say our words), *haptics* (contact, touch behavior), *artifacts* (objects and appearance), *oculesics* (eye behavior), and *chronemics* (time) (Andersen, 2008). Each of these behaviors has generated numerous research studies, as investigators try to understand these nonverbal cues cross-culturally.

# Regulating Our Boundaries

Space and time are boundary regulation issues. When we feel threatened by an intrusion into our space or territory, we are sensitive and vulnerable. Marking our territory has more to do with psychological ownership than physical ownership. This is the feeling we have of owning the particular spot. If our territory is taken over, we react without taking a moment to think about our behavior and our actions, because we perceive a violation. Students in classes will often complain

when someone "is sitting in my seat." Although classroom seats are open game, it is a personal affront, creating a sense of violation if one's "psychologically owned" spot is invaded.

Humans communicate personal closeness and space through a series of actions, especially nonverbal actions, called immediacy behaviors by interpersonal communication scholars. This dimension is reflected in actions that communicate warmth, closeness, approach, and accessibility, or, at the other extreme, by behaviors expressing avoidance and distance (Andersen, 1985, 2008). Our immediate behaviors may include smiling, touching, eye contact, open body positions, closer distances, and more vocal animation. High-contact cultures are those in which people stand closer, touch more, and prefer more sensory stimulation than do people in low-contact cultures (Hall, 1976). High-contact cultures include South American, southern European, and Arab nations. Moderate-contact cultures include Australia, Canada, and the U.S., while low-contact cultures include Asia and Eastern Europe. According to Andersen (2008), high-contact cultures are located in warmer climates, and lower contact cultures reside in cooler climates and high altitudes. What is the reason for this phenomenon? "Cultures in cooler climates tend to be more task oriented and interpersonally 'cool,' whereas cultures in warmer climates tend to be more interpersonally oriented and interpersonally 'warm'" (Andersen, 1999, p. 91).

It is tempting to draw conclusions about people without understanding their culture. When someone from a different culture does not look at you directly, it is easy to assume that he or she may disrespect you, is shy, or is not interested. However, some cultural groups believe that looking someone in the eyes is disrespectful (e.g., Thailand, Navajo Indians). Before judging an action, it is best to engage in conversation and find the meaning behind the gestures. Nonverbal cues communicate status, power, in-group and out-group differences, and unique identities. In attempting to understand within-culture and across-culture nonverbal variations, flexibility, respect, and patience serve as good first steps in gaining nonverbal entrance to a culture.

# The Intersection and Boundaries of Identity: What This All Means

Behavioral cues are related to our nonverbal messages. Nonverbal cues communicate status, power, in-group and out-group differences, and unique identities. If we believe that our self-concept influences how we feel, think, and act toward others, we can see how this may explain the need we have to draw boundaries in our constant negotiation of identity. Individuals may be grouped together under one categorical ethnic label, but a global label may utterly fail to explain the variety of associations each of those individuals has made in the process of forming an ethnic identity.

As our global cities merge, the need to look "global," and even culturally ambiguous, has interesting implications. Marketing cosmetic and plastic surgery around the globe is a lucrative enterprise. For example, according to Schuman (2001), some Korean women have increasingly widened their eyes in a relentless drive to attain a Western image of beauty. For similar reasons, some young Korean women undergo nose reconstruction, breast implants, construction of false buttocks, face lifts, and Botox® injections. In China, some people have surgery to elongate their legs in an attempt to compete globally and stand as tall as their Western counterparts. Iran ranks high among countries in which individuals are not content with their noses, making plastic surgery popular (Nayeri, 2014). Body and face alterations definitely serve the nonverbal function of intentional identity negotiation. If used successfully, surgery can enhance an individual's self-esteem and appearance. However, if an operation fails, the results may damage an individual's remaining self-confidence or distinctive personality.

The tension between seeking in-group membership and avoiding out-group rejection may be anchored in the daily life and social practices in which cross-cultural communication encounters occur. The contradictory nature of an identity may be accounted for in two ways: (a) ethnicity and ethnic identity are contextual and situational; and (b) ethnic identity is less a static group phenomenon than a social process of becoming. These two issues have clear implications for communication research and for advancing theoretical applications.

#### Contextual Frame

Social identity theory indicates that the more strongly one identifies with the group, the more bias one shows in favor of his or her group against salient outgroups (Brewer, 1997). But what if one perceives the internal ethnic group as the out-group? Thus, being, for example, "German" or "Tanzanian" may be highly contextual, and membership in such a collective group may not imply or allow for either ethnicity or cultural variability, resulting in individual conflict. Attempts to expand the framework of social identity theory to understand the structural features of the social environment, perceptions, and motivations at the individual level will be important for cross-cultural studies. In this way we can perhaps identify the contextual and situational parameters that trigger affective responses to in-group and out-group membership, and further explicate the determinants of social category salience. Examining group salience will help develop a broader understanding of the nature of internal group differences. Research in this area may also shed further light on the role of interpersonal attraction within and across cultural groups.

According to interethnic attraction research, the strength of individuals' ethnic identities is related to intergroup attraction and dating (Chung & Ting-Toomey, 1999). Individuals with assimilated, bicultural, or marginal identities have a greater tendency to date and/or marry out of their own groups than those who view their

ethnic identities and traditions as very important aspects of their self-concept. There are also times during which individuals are attracted to culturally dissimilar others because they perceive these partners as typical or atypical of their own culture. This means that people activate stereotyping processes in initial intercultural attraction stages—be they positive or negative stereotypes. Chung and Ting-Toomey (1999) studied Asian and Asian American groups concerning the influence of identity on relational expectations of potential dating partners. They found that Asian Americans who rated themselves high in ethnic identity tended to hold unfavorable attitudes toward out-group dating. Conversely, Asian Americans who had weaker ethnic identities held favorable attitudes toward out-group dating.

#### Ethnic Identity: Living with Tension

Ethnic identity is less a static group phenomenon than a social process of becoming. For people in the U.S., this dialectical tension, between the need to be recognized as a member of the ethnic group in America, and as a member of an ethic community, supports Ting-Toomey's (1993) identity negotiation perspective. This view holds that the contradictory state existing between a sense of group belonging and a sense of wanting to become separate from the group is associated with ethnic identity. To achieve balance between both states, the individual must constantly and consciously negotiate and renegotiate identities. This state of needing to belong to both groups equally is, in one sense, a form of self-actualization, to the extent this implies having a universal identity/intercultural identification (Kim, 1995).

Inevitably, as we become an international community, there are further implications of the balance between inclusion and differentiation. The drive to appear "globally homogeneous" (or perhaps more specifically, Hollywood Western) has some interesting influences on identity management. For example, an "e.net identity" (Ting-Toomey & Chung, 2005) is a composite identity shaped by technology, popular culture, and mass consumption. An e.net self can have both internal and external facets. Internally, one can hold both components of ethnic-cultural values (e.g., collectivism and individualism) and contemporary value orientations. An individual with an e.net identity has a sense of belonging on a global level and is connected with diverse yet like-minded individuals who actively carve out a distinctive "adopted community" (e.g., by music or game types) and communicate fervently via Snapchat, Instagram, or Twitter.

This new global, ambiguous identity creates a tension between becoming global and remaining local. The global identity may be a person who adopts and embraces the practices of Western culture, is open to receiving non-traditional information, and may select the foreign product because it is different from his or her local

culture. The global child may be eager to embrace a new custom and challenge the tradition of the local group. A global child is likely to eagerly watch children's shows from an iPad or tablet and be ready to move to YouTube.com as he or she grows older. Preference for, and acceptance of, foreign programming may increase the influence of the values presented (Elasmar, 2003), and increase the tension between global and local cultures.

# Wrapping Up

The intersection of culture, communication, and identity holds hope for improving and carving out our understanding of crossing boundaries. A cross-cultural lifestyle demands both negotiation and flexibility to navigate through life's misunderstandings. Our experiences may be filled with trials and tribulations, with some unexpected bumps in our journey. However, an understanding of how we can support, embrace, and understand those who are different from us can open our minds and eyes to the diverse richness of human expression.

With an increase in groups transcending boundaries and moving around the globe, the question of identity and group membership gives us a reflective pause and concern. The range of issues is enormous, but a common thread is the individual attempt to achieve identity in the context of a large, stereotypical group. Thus, social identity theorists continue to address questions of group homogeneity, and understanding the complexity of ethnic identity as it is shaped and molded by group- and society-level influences constitutes a major challenge for future communication researchers.

The situational nature of identity challenges communication scholars to understand the impact of prescribing a general "group membership" ethnic identity which is not the ascribed self-identity. A second challenge is to find the behavioral cues associated with in-group or out-group status during interactions with members of the same ethnic group, and to determine how individuals perceive these cues.

To understand the person with whom you are communicating, you need to understand yourself and the identity domains which this individual deems important. For example, if the person strongly values broad cultural membership identity, you need to find ways to validate and be responsive to that identity. Conversely, if the person strongly values her personal identity above and beyond a certain cultural membership, you need to uncover ways to positively affirm her desired personal identity. The capacity to do this will depend upon our ability to validate the individual and group differences we encounter in our everyday communications with people across cultural boundaries.

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# Part VII Gender and Sex Roles

Around the world, women and men exert control over different levels of resources and power, with women virtually always less influential than men. Women experience pressures to conform to cultural standards for physical appearance, and are victims of sexual violence in many countries. Although educational opportunities for women have improved in some places, they remain limited in many cultures, and both men and media control messages influencing women's self-images—sometimes producing depression and lowered self-esteem.

Women's pay is usually lower than that of men, and such roles as motherhood, although varying across cultures, nevertheless define the lives of many women. Women are also disproportionately victims of violence, sometimes at the hands of acquaintances and family members. Women's rights and their treatment are thus major issues across the planet.

Despite this rather pessimistic picture of women's status and well-being, there are some reasons for optimism. Women have made gains in rights, opportunities, and treatment in locales, and have attained positions of leadership and power in some governmental and other organizational structures. What cultural factors promote female power and leadership? How have women's advocates achieved their gains? These are the kinds of questions we raise in this section of the book.

We will also examine how some aspects of women's experience find parallels in the lives of individuals who differ from the dominant (heterosexual) pattern of sexual practices in many of the world's cultures. Those who differ from the dominant culture—homosexual, bisexual, transgendered, and transsexual individuals—have often been the subject of prejudice and discrimination. Such sexual stigma is frequently institutionalized in such cultural structures as laws and religions, and

only a tiny percentage of nations have constitutional provisions prohibiting discrimination against sexual minorities.

Similarly, few cultures allow equal marriage and parenting rights for sexual minorities, and there are wide variations in personal attitudes toward homosexuality and other minority patterns of sexual behavior. Prejudice against sexual minorities can lead to problems of self-esteem and mental health, and we will find that education, religion, and socioeconomic status are correlated with prejudicial attitudes. We might ask why (and how) these attitudes come about, and the different ways cultures deal with them when they occur.

# Women Across Cultures

# Hilary M. Lips and Katie M. Lawson

Women's lives differ, sometimes drastically, across cultures. Yet there are themes in their difficulties and challenges, in their strengths and successes, that link women's experiences across cultural boundaries. In diverse cultures, women face an emphasis on molding their bodies to fit cultural standards of physical beauty, an expectation that they will carry the major burdens of childrearing, and are ascribed status that is lower than men's. Yet women in different cultures deal differently with such issues. This chapter examines some of the important commonalities and differences in women's lives across cultures, including physical bodies, motherhood and family, work and pay, violence, power and leadership, and feminist activism. A theme that links all these issues is the gendering of power. Women and men control different amounts and types of the resources that confer interpersonal and collective power; such differences in access to resources help shape gender differences in behavior.

# Physical Bodies and Appearance

Worldwide, women are pressured to adhere to strict standards of physical beauty— a beautiful body is one resource a woman can use to gain status, solidify relationships, and attract other resources. Body dissatisfaction often results from this pressure to be beautiful, prompting women to go to great lengths to mold their bodies to conform to cultural standards. In parts of Myanmar, Africa, and Thailand, girls as young as age 3 begin to wear rings around their necks in an attempt to make them appear longer, in order to attract an affluent husband as an adult.

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Over the years, they add additional rings, weighing up to 12 pounds. The rings push down the collarbone and ribs to create the illusion of a neck up to 10–12 in. longer (Innes, 2014; Mydans, 2001). In the United States, about 92% of 17.1 million cosmetic procedures (such as breast and buttocks implants, collagen lip injections, and liposuction) were performed on women in 2016 (American Society of Plastic Surgeons, 2016).

Although women worldwide suffer body dissatisfaction, the type of dissatisfaction depends on the culture. Women in western cultures often strive for thinness (which is associated with control, wealth, and happiness), while individuals in non-Western, poorer cultures may associate thinness with poverty, disease, and malnutrition, and thus admire larger women. Traditionally, affluent cultures prefer thin women whereas poorer cultures prefer larger women, but the gap between these cultural preferences has been shrinking due to the "westernization" of many cultures (Grogan, 2008). One large cross-national study (Swami et al., 2010) revealed only small differences in ideals for the female figure and in body dissatisfaction among high-socioeconomic (SES) sites. However, heavier bodies were preferred in some low-SES as compared to high-SES sites. Women's body dissatisfaction was correlated with their exposure to Western media—a finding that echoes those of other cross-cultural studies (e.g., Swami, Miah, Noorani, & Taylor, 2014; Ting & Hwang, 2007).

Cultures differ not only on weight preferences, but also on desirable size for particular areas of the body. Young Canadian women report more dissatisfaction and concern for the weight of their lower torso (abdomen, hips, thighs, and legs); women in India report more concern for the weight of their upper torso (face, neck, shoulders, and chest; Gupta, Chandarana, & Johnson, 2001). Specific physical features linked to body dissatisfaction vary among cultures; for instance, a study of women in Thailand found that facial appearance, skin color, and skin texture all were more salient to body dissatisfaction than body weight and shape (Rongmuang, Cortea, McCreary, Parka, & Miller, 2011).

The world's population is aging. Given women's numerical dominance of older ages worldwide, understanding the impact of physical aging on women is increasingly important. Western social scientists have argued that women's self-worth is more "embodied" than men's—that by the time women reach old age, they have absorbed decades of judgment about their appearance that affects their self-esteem (Holstein, 2015). The loss of youthful forms of beauty and of some easy functionality of youth can be distressing for older women in westernized cultures. Anxiety occurs even though they adjust their expectations and their comparison groups to account for physical aging (Carter, 2016; Tiggemann, 2004) and may embrace a heightened salience and appreciation of body functionality and health over appearance (Tiggemann, 2015). Western media promote negative attitudes about the aging female body: women in the United States are more anxious about aging and more concerned about physical appearance changes than women in Korea (Yun & Lachman, 2006). Negative attitudes pervade many developed cultures.

Women view other women as "old" at earlier ages than they do men in Qatar (Musaiger, D'Souza & Al-Roomi, 2013) and old women are more negatively stereotyped than old men in Sweden (Oberg & Tornstam, 2003).

Where women do not internalize western media representations of beauty, or where women wear clothing designed to conceal their bodies, older women may express less body dissatisfaction (Dunkel, Davidson, & Qurashi, 2009). However, even in countries such as Iran, which enforce concealment-oriented dress for women, women fret about their size and weight (Alqout & Reynolds, 2014; Nikniaz, Mahdavi, Amiri, Ostadrahimi, & Nikniaz, 2016).

#### Theories

Two major types of theories analyze women's body dissatisfaction. Sociocultural theories suggest that cultures influence body dissatisfaction through media, family, peers, and other sources (Becker, Burwell, Herzog, Hamburg, & Gilman, 2002). Women compare themselves to ideals presented by these sources to make judgments about their own bodies. In cultures where women are constantly exposed to images of very thin women (e.g., the U.S.), women make numerous upward social comparisons daily, thus increasing body dissatisfaction (Leahey, Crowther, & Mickelson, 2007). The observation that westernization is correlated with increasing preference of nonwestern cultures for thin women supports sociocultural theory (Grogan, 2008).

Feminist theories, particularly objectification theory, suggest that women's cultural roles influence body dissatisfaction, and that body standards are tools for oppressing women (Fredrickson & Roberts, 1997). Unachievable body ideals, along with societal pressure to attain the perfect body, lead women to focus on superficial appearance concerns instead of more important issues such as their own competencies. Feminist theories predict more body dissatisfaction in women within cultures where there is rapidly increasing equality in gender roles—because women's advances create a backlash that includes more pressure for the perfect body. Support for this interpretation is mixed. As predicted by feminist theory, Korean women (who live in a culture characterized by rapid social change toward increasingly equal gender roles) report more body dissatisfaction than do women in the United States and China (Jung & Forbes, 2007; Jung, Forbes, & Lee, 2009). However, women in Brazil and Argentina, where social change has been rapid and unsettling, do not show higher levels of body dissatisfaction than U.S. women do (Forbes et al., 2012).

#### Consequences of Body Dissatisfaction

Body dissatisfaction and body shame in women are associated with depression and low self-esteem (e.g., Kahumoku et al., 2011; Paxton, Eisenberg, & Neumark-Sztainer, 2006) and with suicidal ideation and intent (Unikel, Von Holle, Bulik, & Ocampo,

2012). Body dissatisfaction also leads to actions, such as dieting, over-exercising, or choosing cosmetic surgery—that can have dire consequences for women's health. Even in countries with very sophisticated medical technology, cosmetic surgery can lead to damaged bodies, infection, or even death (Khunger, 2015). Furthermore, even though cosmetic surgery can have positive effects on women's self-confidence, there is a risk of negative emotional consequences: depression, anxiety, anger toward surgeons, and/or isolation after surgery (Dittmann, 2005; von Soest, Kvalem, & Wichstrøm, 2012).

Body dissatisfaction can also lead to eating disorders—anorexia nervosa, bulimia nervosa, and binge-eating disorder. Eating disorders and unhealthy weight-control behaviors such as purging, extreme dieting, and overuse of laxatives are more common among women than men, are linked to body dissatisfaction, and occur at significant rates in many countries (e.g., Feinson, & Meir, 2014; Nakai, Nin, & Noma, 2014; Pike, Hoek, & Dunne, 2014). Eating disorders are associated with mental health problems (e.g., depression, anxiety, substance abuse) and physical health problems, including anemia, osteoporosis, hair and bone loss, kidney failure, intestinal distress, heart attacks, and even death (National Institute of Mental Health, 2014).

#### Motherhood and Family

One reason women have traditionally been defined so strongly by their physical bodies is that the biological processes of reproduction—menstruation, pregnancy, childbirth, lactation—are so obvious in women. Historically, many cultures have surrounded these processes with myths, elaborate rituals, and taboos. For example, some Native American cultures regarded menstruating women as so powerful that they must stay away from men preparing for battle, lest their power interfere with the warriors' power (Allen, 1986). The onset of menstruation, with its implication that pregnancy is now a possibility, is the trigger for new parental concerns and behavioral restrictions on young women in many cultures—from emphasis on modest dress to increased parental control and admonitions about sexuality (e.g., Golchin, Hamzehgardeshi, Fakhri, & Hamzehgardeshi, 2012; Grant, 2012; Lee, 1994).

Although constructed from a biological link between mother and child, motherhood is a profoundly cultural role and process. Even the physical process of labor and delivery reflects cultural norms. As Sudarkasa (2004) noted, childbirth in the West tends to occur with the woman lying on her back with her legs spread apart, whereas the tradition in parts of Africa and elsewhere is for the woman to give birth from a kneeling position.

Aligned with the focus on reproduction is the notion that motherhood, and the domestic responsibilities that go with it, are a primary role for women—and that women are better suited to such work than men. Around the world, women devote

more of their time then men do to the bearing and rearing of children. One overview of time use studies carried out in 20 countries between 1965 and 2003 showed that men spent an average of only 14 min per day on childcare, thus leaving most of that work to women (Hook, 2006). In the United States, during 2011–2015, full-time employed, married mothers of young children spent an average of 1.3 hr per day on childcare as a primary activity (i.e., they were not simply with their children while focusing on something else, such as watching TV); fathers spent 0.85 hr per day (United States Department of Labor, 2017). A study of parents in 15 European countries shows a continuing gap between mothers and fathers in time devoted to childcare, although that gap has shrunk in some countries where parental leave policies are in place (Moreno-Colom, 2017).

Motherhood is understood as central to women's identity (Wilson, 2007). In some cultures, a woman without children is considered a failure—perhaps not even a real woman (Batool & de Visser, 2016; Bimha & Chadwick, 2016). However, just producing children is not enough to succeed at this role. Mothers often face high standards for their feelings and expectations toward their children (e.g., Kerrick & Henry, 2017). In many Western cultures, motherhood involves aspiring to an ideal of love and self-sacrifice (Wilson, 2007) and conforming to an ideology of "intensive mothering" that is child-centered, labor-intensive, emotionally absorbing, and puts the child's needs before the mother's (Hays, 1996). Mothers in various cultures feel the pressure of this ideal (e.g., Cairns, Johnston, & MacKendrick, 2013; Shloim et al., 2015). This ideology of motherhood fits into a broader ideology that women are supposed to care for others—that they must be sensitive and responsive to the needs of others, even when they themselves are exhausted, stressed and ill (Forssén, Carlstedt, & Mörtberg, 2005).

The ideology of caring does not portray mothers as particularly powerful indeed, they seem to be subservient to their children in some respects. Expectations differ across cultures, however. In Japan, where women are under strong pressure to be mothers, the mother role has traditionally involved independence and status. Mothers have significant control over family decisions related to their children and have respected status as an influence group when speaking about children's needs to government officials. Japanese women report having a strong commitment to gaining status, respect, and self-worth from their roles as mothers (Bankart, 1989; Holloway, Suzuki, Yamamoto, & Mindnich, 2006). In matrilineal cultures, as in some Igbo communities in Africa, family lineage is determined through the mother, making mothers a central force in defining their families (Nzegwu, 2004). Indeed, it is the mother role that brings community power and prestige to many African women (Sudarkasa, 2004). In some West African cultures, female elders develop the status of "public" mothers to their communities, with authority based upon the symbolism of motherhood (Semley, 2012). Motherhood also confers moral authority on women activists, such as the Saturday Mothers and the Peace Mothers in Turkey, who have lost children through war or persecution, (Karaman, 2016).

Claiming and adapting to motherhood as an identity may be especially complex for sexual minority women. Feeling validated as a new mother may depend on the degree to which a lesbian woman is "out" at work and in her community (Hennekam & Ladge, 2017). In many countries, legal and social recognition of lesbian mothers' role is problematic, leading to tension between discretion and visibility, conformity and marginality (e.g., Keiko, 2006; Sobočcan, 2011). For transgender parents, who do not fit the female/mother and male/father model of parental identity, the designation of "mother" may be multidimensional, nonbinary, and fluid—influenced by the degree of acceptance in the public environment, cultural pressures, and relationships with children and the partner (Petit, Julien, & Chamberland, 2017).

Despite the stereotype that motherhood presumes caring and attachment, there are numerous examples of mothers abandoning or even killing their babies. In cultures plagued by extreme poverty, where infant mortality is especially high, mothers may refrain from attachment to infants until they have survived their first months of life, sometimes not even naming them. In one desperately poor Brazilian shantytown, mothers expressed pity toward, but selectively neglected, infants not expected to survive—saying that it was best to let weak children die because they would never be strong enough to defend themselves as adults. Yet, these mothers were very affectionate toward their children and, in the few cases where neglected children survived, the mothers accepted and loved them (Scheper-Hughes, 1985). In some respects, the mothers in this impoverished community had only the choice to emphasize grief or resignation when faced with the imminent loss of a sickly child. Their situation reminds us that the mother–child bond should be understood in the context of culture and available resources.

Across cultures, mothering and caregiving are women's work, but women do not receive the resources and support they need to do that work. The high importance placed on motherhood does not mean that most women can choose to do only the unpaid work of rearing children; the typical woman in most countries combines motherhood with economic activity outside the home.

# Work and Pay

Cultural norms affect whether women work outside the home. For example, in Afghanistan, only 18.5% of women are in the labor force, compared with 47.7% in Argentina, 59.2% Australia, and 72.6% in Bermuda (United Nations Statistics Division, 2016). Globally, about half of women aged 15 and over participate in the labor force; the worldwide norm is for women to carry the double burden of work both outside and in the home (World Bank, 2017). In the United States, more than 56% of women are in the workforce (World Bank, 2017), and women are 64% of primary or co-breadwinners for families (Glynn, 2016).

Women are paid less than men worldwide. Culture and public policy influence the extent of this gap. In 2017, Rwanda, Iceland, Burundi, and Finland had some of the smallest, but still very significant, gender wage gaps: for similar work, women earned 86%, 81%, 79%, and 79% of men's wages, respectively (World Economic Forum, 2017). The same data source puts U.S. women's wages at 73% of men's for similar work. Many countries have less gender equality and wider wage gaps (e.g., women in Pakistan are paid 55% of men's wages for similar work). Depending on the measures used, the gender wage gap may appear smaller or larger. For example, focusing only on fulltime year-round workers, the U.S. Census Bureau (2018) reported that, averaged across all jobs, women earn just under 80.8% of men's median wages. Regardless of the measure used or region studied, however, there is consistently a gap in favor of men. This gap, cumulated over a lifetime of work, translates into a greater likelihood of poverty for women, particularly in old age (Organization for Economic Cooperation and Development, 2015).

#### The Cost of Motherhood

One important contributor to the gender pay gap is the "motherhood penalty." Around the world, mothers earn less than both childless women and men do; the gap is larger in less developed than in developed countries and increases with the number of children a woman has (Grimshaw & Rubery, 2015). The gap arises, in part, because mothers work fewer paid hours due to family responsibilities (and so have less work experience, job tenure, and opportunities for advancement or mobility), accept low-paying jobs based on factors, such as flexibility and location, that mesh with childcare responsibilities, and face stereotyping and discrimination in employment (Grimshaw & Rubery, 2015). Due partly to the demands of motherhood, women are far more likely than men are to work part-time, in low-paying service and caretaking jobs.

## Occupational Segregation

On average, men work in higher-paying and more powerful occupations than women do. Such jobs are often demanding and require time commitments that can be especially difficult for women with childcare responsibilities when (as is usually the case) there is no structural support for families. Ironically, despite the pressure on mothers to avoid high-power jobs in order to safeguard their flexibility to meet family responsibilities, lower-status and female-dominated jobs often offer the *least* flexibility (Dodson, 2013; Glauber, 2012).

The childcare duties placed on women contribute to occupational segregation, the gender pay gap, and the gendering of power across the world. According to statistics collected by the United Nations, only one country (the Dominican Republic)

had at least 50% of managerial positions filled by women and only five countries (Finland, Cabo Verde, Sweden, France, and Liechtenstein) had at least 50% of government ministerial positions filled by women. In some countries, very few women hold these powerful positions (e.g., only 2.5% of government ministerial positions were held by women in Azerbaijan in 2014 and only 10.8% of managerial positions were held by women in Qatar in 2010; United Nations Statistics Division, 2016).

Countries that have enacted reforms to encourage the sharing of childcare responsibility between women and men have the most equal balance of men and women in high-paying jobs, and thus a narrower gender wage gap. For example, in Norway, both men and women are entitled to paid parental leave (35–45 weeks for mothers, up to 10 weeks for fathers) when a child is born. Parents on leave are paid 80-100% of their wages, provided by a government-sponsored social insurance fund (Weller, 2014). Yemen, on the other hand, mandates shorter paid maternity leave (approximately 70 days), paid for by employers, and no paternity leave. These very different leave benefits for new parents could have a profound impact on the gender wage gap and on women's success in the labor force. Indeed, Norway has significantly higher labor force participation by women, many more women in legislative and managerial positions, and a significantly narrower gender wage gap than Yemen (World Economic Forum, 2017). However, generous leave policies can sometimes backfire: women who take even brief time away from employment may be perceived as lower in their work commitment and/or may miss opportunities for challenging work assignments that lead to advancement—and may thus end up with lower wages (Livingston, 2013).

#### Pay/Hiring Discrimination

If a mother wants to work in a powerful, high-paid occupation, she is likely to face discrimination. Mothers (more than childless women) are often perceived as lacking in job commitment and availability, and are thus chosen less often for management positions and promotions, and are offered lower starting salaries (Correll, Benard, & Paik, 2007; Cuddy, Fiske, & Glick, 2004; Cunningham & Macan, 2007). Because most cultures do not place primary childcare responsibilities on men, fathers do not face the same discrimination. In fact, often fathers are preferred as employees over men without children (Cuddy et al., 2004) and paid more than childless men (Hodges & Budig, 2010).

## Education/Training

In much of the developed world, men and women have similar access to educational routes toward good jobs. However, opportunities for education are not equal for women and men worldwide. For example, the ratio of girls to boys

enrolled in primary school is 63% in Angola, 69% in Afghanistan, 85% in Pakistan, and 84% in both Yemen and in Iraq. For secondary education, the balance is tilted even more strongly toward boys. For every 100 boys enrolled in secondary school, there are 45 girls in Chad, 51 girls in the Central African Republic, 52 girls in Togo, and 76 girls in Saudi Arabia (UNESCO, 2016).

Worldwide, two-thirds of adults and youths who are not able to read or write are women (UNESCO Institute for Statistics, 2016). Without an education, girls are less likely to become economically independent, thus reducing their power to make life choices, including the ability to escape from harmful, violent situations.

#### **Violence Against Women**

In most cultures, men, far more often than women, are the targets of male violence, perhaps because many cultures stress a competitive, aggressive ideal of masculinity (Eibach, 2016). However, around the world, women are the most frequent targets of intimate partner and sexual violence perpetrated by men. Both intimate partner violence and sexual violence have a private face; they often take place behind closed doors and are not reported by shamed and frightened victims. Indeed, under-reporting makes it difficult to obtain accurate estimates of its occurrence.

A review of 134 studies, with data collected in 6 continents, indicated that *intimate partner* violence against women is common worldwide. Lifetime physical violence rates ranged from 10.6% to 78.7% of women, lifetime emotional violence ranged from 7.4% to 92.0%, and lifetime sexual violence ranged from 3.4% to 58.6% (Alhabib, Nur, & Jones, 2010). A recent review of research on the rates of *non-partner*, sexualized violence against women found that 7.2% of women worldwide reported non-partner sexualized violence in their lifetime. Rates varied by country, with the highest rates seen in the central part of Sub-Saharan Africa (21.0%) and the lowest rates in South Asia (3.3%; Abrahams et al., 2014). Refugee women, in particular—a group of approximately 9.8 million individuals—are at high risk for sexualized violence (UN Women, n.d.; Hynes & Cardozo, 2000).

Violence against women often involves long-term, repeated patterns of abusive activity rather than isolated incidents and is frequently perpetrated by men (spouses, relatives, acquaintances) who are known to the victims. The female victims are often blamed for causing the violence, and women often experience difficulties getting justice in the criminal justice system (Koss, 2000; Watts & Zimmerman, 2002). Cultural attitudes that grant higher status, power, and resources to men support these patterns. For example, the notion that men should be the heads of their households implies that they should be able to control "their" women, and women's dependence on men for economic and social resources can mean they have few options for leaving an abusive situation. Cultures that emphasize male dominance,

separate spheres for the two sexes, and high levels of interpersonal violence have a higher incidence of rape (Sanday, 1981, 2003). Men high in hostile masculinity and male dominance beliefs are more likely than other men to self-report past sexual aggression (Murnen, Wright, & Kaluzny, 2002) and women who report intimate partner violence are more likely than other women to be surrounded by men who engage in controlling and limiting behavior toward them (Ellsberg et al., 2008).

Recent advances in technology have led to additional ways in which women can be targeted, including through cyberstalking and nonconsensual pornography (NCP). Approximately five million individuals, 60% of them female, experience cyberstalking each year. Unlike face-to-face stalking, where most stalkers are former partners, harassers are more likely to be complete strangers or casual acquaint-ances. Threats and false information spread by the harasser can ruin reputations and create fear in victims, with some studies estimating that one-third of victims show symptoms of post-traumatic stress disorder (PTSD) (McVeigh, 2011). Technology has also led to an increase in NCP, or the posting of sexually graphic images of another individual without his/her consent (Cyber Civil Rights Initiative, n.d.). For example, a recent high publicity case in the U.S. involved men in a college fraternity posting pictures of naked and unconscious women to a private group on Facebook (Kaplan, 2015). Laws that have not been updated since the increase in social media use, lack of training for police officers, and jurisdiction issues make it difficult for victims to prevent and stop cyberstalking and NCP (McVeigh, 2011).

#### Violence Against Women as Public Performance of the Gender System

In certain situations, violence against women becomes a public performance of gender hierarchy and male status: an overt statement about men's ownership of and right to authority over "their" women. The most dramatic example is honor killing: the murder of a woman whose behavior is deemed to have brought dishonor to her husband, father, and/or other family members. The behavior that prompts this reaction involves women transgressing cultural boundaries of propriety in ways that may range from dressing in unapproved ways, going unchaperoned to particular places, or being in the company of unrelated men, to having intimate relationships outside of marriage, being raped, or even marrying a man without family approval. Such killings, most often carried out by a male relative, claim the lives of more than 5,000 women every year worldwide (United Nations Population Fund, 2000). They occur in countries as diverse as Turkey, Jordan, Egypt, Pakistan, India, Israel, and Brazil, and are often treated leniently by legal systems (Parrot & Cummings, 2006).

Underpinning the practice of honor killings are cultural norms that tie a man's honor and standing in the community to his ability to control his wife and daughters. In certain poor communities where such norms are strong, the only possession of value a man may feel he owns is his honor. An indiscreet woman is seen as bringing

shame on her family and destroying that one important possession—a possession that is clearly viewed as much more important than the woman herself. The cultural assignment of higher value to men's honor and community standing than to women's lives is a grim indicator that women's welfare is considered inconsequential relative to men's.

Ironically, rape (for which women are often punished) is also used as a tool of punishment against women for violating rules of sexual propriety, or even just for intruding into spaces, occupations, or situations where they "do not belong." Rape also enacts male-male hostility: one man can dishonor another by raping his wife, daughter, sister, or mother. In one case that stirred international protests, Mukhtaran Bibi, a young woman in rural Pakistan, was gang-raped by four men on the orders of the tribal council, and then forced to walk home naked in front of jeering villagers—all because her brother had been seen with a woman from that village (Kristof, 2005). The rape of women during war by enemy soldiers is a common way of dishonoring and demoralizing a community, leaving a lasting legacy of humiliation and bitterness. For example, during the war in Bosnia in the early 1990s, some estimate that more than 20,000 women were raped (Parrot & Cummings, 2006); during the genocide in Rwanda in 1994, between one-quarter and one-half million women were raped (Human Rights Watch, 1996). Others in their communities then viewed these women as "ruined" and the pregnancies that resulted from the rapes provided a constant reminder of the trauma and this "spoiled" status.

#### The Business of Violence Against Women

In many contexts, the abuse of women is a for-profit enterprise. Sexual exploitation of girls and women, trafficking of women for the purpose of prostitution or forced labor, pornography that exploits images of female humiliation—all are thriving businesses in many parts of the world. For example, it is estimated that as many as 21 million persons, about 80% of them women, are trafficked across national borders each year into situations of forced servitude (International Labour Office, 2017). Refugee women are particularly vulnerable to trafficking due to lack of economic opportunities, desperate social conditions, risky survival strategies, discrimination due to gender, ethnicity, race, or religion, the erosion of rule of law and/or weak governments in areas of crises, and the targeting of refugee camps by criminals (IOM, 2015). Like other forms of violence against women, these practices are grounded in cultural norms and practices that provide men with more access to resources and in attitudes that women can be considered property. Although there are ongoing attempts by international non-governmental organizations to stem these practices, many governments have responded weakly to the problem. Turning a blind eye suggests tacit support for male control over women and the primacy of male needs and wants over women's welfare.

#### Impact of Violence on Women's Health

Violence has a multitude of consequences for women's physical and mental health. In almost every site covered by a large international study, women who had experienced partner violence in their lifetimes were more likely than other women to report poor health, including difficulty walking, trouble carrying out daily activities, pain, memory loss, dizziness, vaginal discharge, emotional distress, suicidal thoughts, and suicide attempts (Ellsberg et al., 2008).

The psychological impact of violence has profound implications for women's ability to achieve success, status, and power relative to men. Women victimized by partners often experience long-lasting anxiety, depression, and low self-esteem, making it difficult for them to function effectively (Matud, 2005). Women who live in situations where violence against women is common learn to be alert, careful and avoidant (Khalid, 1997). Such caution limits their mobility and interferes with their economic and social opportunities. Thus, an atmosphere of violence against women, whether in the private context of the home or the public context of the street, serves as an effective way of controlling women.

Given these diverse consequences, international policy analysts now view violence against women as both a public health problem and a human rights issue. The shift from viewing violence against women as a private, interpersonal matter to viewing it as a public policy concern may be a direct result of women's increasing access to resources such as education, employment, and a voice in the media, that promote their movement into positions of public power and leadership.

# Power and Leadership

Across cultures, men are more likely than women to hold public positions of leadership. Women are routinely stereotyped as less powerful, less dominant, and less influential and are ascribed lower status and importance than men. The association of men with power is so normative that women who behave in overtly powerful ways are often disparaged as unfeminine, unattractive, and unlikeable (Parks-Stamm, Heilman, & Hearns, 2008). If they persist, they may even become targets of violence—as in the case of Malalai Kakar, the first Afghan woman to graduate from the Kandahar Police Academy, murdered by the Taliban in October 2008 for daring to step into a role reserved for men (BBC News, 2008).

Disparagement of powerful women is not inevitable, however. For example, in certain Native American cultures, women were ascribed high levels of spiritual and political power (Kehoe, 1995). Some cultures make exceptions for older women, whose perceived power may increase with age (Friedman, Tzukerman, Wienberg, & Todd, 1992) and who may even, among groups such as the Maori and the Lahu, achieve high status as elders and as wise, powerful matriarchs (Dashu, 1990).

#### Interpersonal Power

The exertion of interpersonal influence rests on control of resources: the capacity to reward, punish, or convince another to take an action or position s/he did not originally intend to take (French & Raven, 1959). Such resources may be relatively concrete (money, objective information, physical strength) or personal (expressed disapproval, affection, or admiration) and may involve mainly individual relationships or cultural expectations and norms.

The exertion of interpersonal power is gendered because access to resources is gendered. In many situations, men have more access than women do to money and education, giving them more scope than women to exert interpersonal power by rewarding or convincing others. In situations where men are deemed to have legitimate authority over women, the full force of cultural norms helps men to wield power over women. Thus, for example, if culture dictates that the man is "head of the house," a woman opposing her husband on some decision must push against not just her husband's individual arguments, threats or promises, but the weight of cultural expectations that a wife should give in to her husband's wishes.

In cultures where power and dominance are viewed as unfeminine, research has shown that both men and women penalize women who exhibit these characteristics—including female workers who are successful in masculine occupations. The counterintuitive finding that women themselves penalize powerful, dominant women may be due to social comparison. Women who see themselves as possessing these masculine qualities are less likely to penalize powerful women (Lawson & Lips, 2014). Due to the possibility of penalization, often women who want to exert influence learn to do so by "softening" their approach and/or their image. Indeed, researchers find that women can defuse potentially negative reactions to their power by emphasizing such qualities as cooperativeness and concern for others (Phelan & Rudman, 2010).

## Public Leadership

Women are still far less likely than men to hold positions of public leadership. As of this writing, for example, women headed only 15 of 193 national governments (Geiger & Kent, 2017). The Gender Inequality Index (GII), an index conceived by the United Nations Development Program, provides one way to quantify women's public power and compare it across countries. Using this index, which includes measures of women's political participation, workforce participation, and education levels, it is possible to see some of the large differences among countries in women's access to power and leadership. Recent statistics show Switzerland and Denmark as the countries with the lowest GII scores, and thus as the countries in which women and men's public power is closest to equal. Both countries have index scores lower than 0.042, where 0.0 would indicate equality on the selected measures. By contrast, Yemen, Chad, and Niger have

extremely high GII scores (greater than .690), indicating a great deal of inequality in the distribution of public power between women and men. The United States ranks 43rd on the list, with a GII score of .203 (United Nations Development Program, 2016).

What cultural factors promote female leadership? One dimension appears to be the degree to which a culture accepts hierarchies and an unequal distribution of power. One 25-country study revealed that countries with strong acceptance of hierarchies are also characterized by high gender inequality (Glick, 2006). Other contextual issues also appear to be important. One review of leadership research revealed that women are most likely to be evaluated harshly as leaders in situations where people are not used to female leaders, settings where most of the participants are male, and leadership positions that seem to call for a directive "masculine" leadership style (Eagly, Makhijani, & Klonsky, 1992). Women political leaders have sometimes adjusted to these requirements by styling themselves as "mothers" of their countries—thus adopting a "feminine" aspect to their leadership role (Anuradha, 2008).

The presence of women in visible leadership positions may increase the perceived normalcy of female leadership and thus reduce resistance. It may also increase young women's belief in the possibility that they can be leaders—a belief sometimes found to be weaker than men's (Killeen, López-Zafram, & Eagly, 2006; Lips, 2000, 2001). Thus, cultures in which women leaders are less rare may be supportive of increased female leadership. Apfelbaum (1993) suggested such a conclusion in a cross-cultural study that revealed large differences in the experiences of female leaders in Norway and France. Norwegian women in leadership relished and felt entitled to their power; French women felt isolated, lonely, and continually under siege in their positions. Apfelbaum attributed the difference to cultural context: women in Norway were in a culture where female leadership was common, expected, and supported; French women, by contrast, were trying to lead in a culture where female leaders were still an anomaly.

The legitimization of female leadership through explicit cultural rules and laws or by strong and obvious cultural norms is also likely to have a positive effect. For example, a laboratory study by Yoder, Schleicher, and McDonald (1998) compared the influence over an all-male group of a woman leader who either had or had not received special training and was described by a male experimenter as either randomly appointed or especially trained to lead the group. Only the women who were both trained *and* legitimated by the experimenter were effective in influencing their groups' performance. It appears that simply placing women in leadership positions, without legitimizing them through some cultural authority, is not sufficient to ensure their power.

#### Collective Power: Feminist Activism

Much of the feminist activism that has improved the lives of women around the world started with small groups of concerned women. For example, in 1990, a group of 47 women in Saudi Arabia drove around Riyadh (the capital) in protest of

the ban against women driving. These women were ultimately arrested, and several lost their jobs, but this act led to others standing up against the ban over the next 27 years. In 2017, the country announced that it would overturn the ban and women would be able to drive starting in June 2018 (Hubbard, 2017).

Small group efforts such as this one can both progress to and stem from large-scale events, such as the World Conferences on Women, which are organized to promote the advancement of women worldwide. The Fourth Conference, hosted in Beijing in 1995, included 189 countries (attracting nearly 50,000 individuals) and led to the implementation of the *Beijing Declaration and Platform for Action*, which has promoted changes around the world through women's advocacy groups and governments (United Nations, 1997). For example, after the conference, Rwanda adopted a quota system for electing government parliamentary and cabinet seats, requiring 30% of the seats to go to women. In 2017, 61.3% of the members of Rwanda's lower or single House of Parliament were women, up from 17.1% in 1997 (Inter-Parliamentary Union, 2017). These women have provided the driving force behind many legislative changes, including the overturning of sexist laws (such as one denying women the right to inherit land) and the passing of legislation aimed at ending domestic violence (McCrummen, 2008).

#### Strategies

Feminist activism encompasses many strategies to improve the lives of women, including research on women's issues, economic assistance for women, education and training, working to change legislation, networking, and/or educating the public about women's issues.

#### Legislation

Feminist activism can promote equality for women by influencing legislation. For example, in 1972, inspired and pushed by the leadership of Senator Patsy Mink, the U.S. passed Title IX, which prohibits sex discrimination in any educational institution funded by the federal government. This legislation prohibits schools from excluding female students from classes, sports, or other activities held within the institution (United States Department of Labor, n.d.). This legislation has led to many significant changes within academic institutions, perhaps most notably within athletics. During the four decades after the passage of Title IX, high school girls' athletic participation increased from fewer than 300,000 to almost 3.3 million, and college women's athletic participation increased from about 30,000 women prior to Title IX to more than 214,000 women (National Coalition for Women & Girls in Education, 2017).

Activism outside government can also to lead to legislative changes. In India, after the brutal rape and murder of a woman on a bus in New Delhi, protests led to the creation of a panel to analyze rape laws in the country. Based on the panel's recommendations, the President signed an ordinance that made new offenses, such as voyeurism, stalking, trafficking of women, and acid attacks punishable under criminal law (Yardley & Bagri, 2013). Without feminists (both in and out of the government) pushing for change, steps toward equality might never be taken.

#### Networking

Today's technology has provided feminists with the opportunity to network with others worldwide in order to communicate and organize activities to support women. For example, after Donald Trump—a man who was caught on tape bragging about sexually harassing women—was elected President of the United States, women used social media sites to organize marches around the globe the day after he was inaugurated. More than 2.5 million individuals marched worldwide. During the march in Washington, D.C., Gloria Steinem emphasized the need to network, stating "Make sure you introduce yourselves to each other and decide what we're going to do tomorrow, and tomorrow and tomorrow. We're never turning back!" (Hartocollis & Alcindor, 2017; Przybyla & Schouten, 2017).

#### Education/Public Awareness

The Internet has become an easy way for feminists to educate the public about issues women are facing around the world. For example, the UN Women launched the HeForShe campaign in 2014 to create a gender equal world. This campaign has taken a multi-faceted approach, relying heavily on technology, to both educate and provide suggestions for individuals to take action. For example, the campaign maintains a website, participated in a Ted Talk (which has been viewed over one million times), and posted a video on YouTube of Emma Watson introducing the campaign (viewed over two million times).

Other social media outlets have allowed feminists to educate others on difficult to describe and understand topics. Hashtags on Twitter have led to conversations about women's experiences, such as #WhylStayed to combat victim blaming of domestic violence survivors, #RapeCultureIsWhen to educate others on how society blames victims of assault and rape, and #EverydaySexism to illustrate women's day-to-day experiences of sexist microaggressions (Blay, 2016). This technology even has the potential to shape modern feminism, as evidenced by the conversation that stemmed from #SolidarityIsForWhiteWomen, which led to a discussion about the importance of including intersectionality in feminism (Loza, 2014).

The Internet is only one of many tools used to educate the public. In Nigeria, where rape is a serious problem and victims (rather than perpetrators) are often punished either physically or through ostracism for speaking about the incident, many victims of rape remain silent. Activist groups work with community leaders to change the norms that force women into silence. In order to promote awareness of the human rights issues in Nigeria, these feminist activists set up media interviews and press briefings, distribute information to promote awareness, and also use popular theater (Onyejekwe, 2008). In India, individuals perform "street theater" to promote awareness about women's issues (Garlough, 2008).

Increased public awareness is essential in changing conditions for women throughout the world. Without knowing the existence and scope of a problem, people cannot be mobilized to try to solve it. Education on feminist issues such as pressure to conform to destructive cultural standards of beauty, the gender pay gap, and discrimination against mothers are essential because these practices are often so ingrained in a culture that they are taken for granted and essentially invisible.

At least in some cases, positive change has been a clear outcome of feminist activism. For example, The *Beijing Platform for Action* not only indirectly influenced legislative changes in Rwanda, but also led to increased public awareness about human rights in countries such as Guyana, which now includes human rights as a subject in school curricula, and Vietnam, which has attempted to remove school textbooks with gender stereotypes and has television shows focusing on gender equality (Women's Environment and Development Organization, 2005).

#### Conclusion

All over the world, women's (and men's) roles, rights, and responsibilities have been shaped by cultural norms that support the assignment of more power and importance to men. The strength of these norms and the magnitude of the differences they support vary by culture, but there seems to be no country in which women and men enjoy equal access to political power and economic resources (United Nations Development Program, 2016). Cultures with the highest levels of equality are not necessarily those with the most resources, but rather those for which gender equity is explicitly enshrined in policies such as labor market regulations banning discrimination and enforcing gender quotas for political participation. Activism by women has been the driving force behind the development of such policies.

Worldwide, the situation is fluid: as women gain more control over their own lives, their sense of entitlement rises and they seek even more advances. The increasing capacity, nurtured by electronic media, for women to connect across cultures seems destined to speed up this process. Continuing progress toward equality is not inevitable, however. The most recent *Global Gender Gap Report* indicates a widening of the gender gap for the first time since 2006, and estimates that it will take 100 years for the overall gap to close (World Economic Forum, 2017) The dispiriting histories of countries such as some former Soviet Bloc nations, Afghanistan, and Iran, where shifts in government sharply eroded women's rights, show how quickly gender equality can be reversed. However, both positive examples of women's progress and negative examples of the ease with which such progress can be reversed illustrate that women's position is very much a function of cultural agreement rather than a function of essential feminine qualities or femalemale differences.

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# Stability or Change? A Cross-Cultural Look at Attitudes Toward Sexual and Gender Identity Minorities

Mary E. Kite, LaCount J. Togans, and Tollie J. Schultz

The rapid cultural shifts toward greater acceptance of sexual minorities are at once surprising and heartening. One need not look far into the past to find widespread derogation of gay men and lesbian women, nor is it difficult to recall a time when those with nontraditional gender identities were invisible at best. As Nadal (2013) has outlined, recent cultural changes toward people's greater acceptance of sexual minorities were preceded by landmark institutional changes. For example, the removal of homosexuality as a psychological diagnosis from the Diagnostic and Statistical Manual of Mental Disorders (DSM) of the American Psychiatric Association was an early sign that views about homosexual behavior and homosexual people would fundamentally change. More recently, then U.S. President Barack Obama signed the 2009 Matthew Shepard and James Byrd, Jr. Hate Crimes Prevention Act, making it a federal crime in the U.S. to assault an individual because of her or his sexual orientation or gender identity. The United States Supreme Court also recently legalized gay marriage with its ruling on Obergefell v. Hodges (2015). These changes, and similar legislative actions in other parts of the world, have undoubtedly influenced public perception; recent polling data show that a clear majority of U.S. residents support the right of same-sex couples to marry and such trends are evident in Australia, Canada, New Zealand, and Northwestern Europe (Smith, Son, & Kim, 2014).

Despite the optimism these changes give voice to, a closer look shows reason for caution: 40% of U.S. respondents still agree or strongly agree that "homosexual relations are always wrong" (National Opinion Research Center, 2017). In some parts of the world, most notably Africa, the Middle East, and much of Asia, extremely negative views about lesbian women and gay men are commonplace (Smith et al., 2014; World Values Survey, 2018), as is violence against individuals

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who are sexual minorities (e.g., Rivers & D'Augelli, 2001). As Herek (2016) noted, it is far too soon to celebrate the demise of the sexual stigma "attached to any nonheterosexual behavior, desire, identity, relationship or community" (p. 357). Negative perceptions of bisexual and transgender people are also common (Norton & Herek, 2013); this lack of acceptance gives way to discriminatory behaviors that have myriad physical and mental health consequences for those who experience them (Meyer, 2003; Nadal, 2013).

In this chapter, we review the cross-cultural literature on sexual prejudice and prejudice based on gender identity. We begin with a review of contemporary terminology related to these biases. We then provide an overview of the cross-cultural laws supporting or denying civil rights to sexual and gender identity minorities. Following this, we summarize cross-cultural attitudes toward these social groups and conclude by discussing the discrimination members of these social groups face and the ensuing mental health consequences.

# **Terminology**

As times have changed, so has the terminology used to identify the social groups affected by prejudice and discrimination; thus, we begin by providing the definitions used in our chapter. We begin by noting that researchers often use the acronym LGBT to refer to lesbian, gay, bisexual, and transgender people. This acronym is often extended to include people who identify as queer, questioning, and asexual (LGBTQQA). Although this inclusiveness recognizes identities that have previously been invisible in contemporary societies—and also to many social science researchers—using these global acronyms is nonetheless imprecise for at least two reasons. One is that doing so conflates two distinct constructs: gender identity and sexual orientation. For example, both partners in a relationship can identify as lesbian women, but each might choose different gender identity descriptors (e.g., as femme, butch, or androgynous; Rothblum, Balsam, & Wickham, 2018). A second problem with using broad categories is that many theories and research results refer to only one or two of the social groups included in the acronym; thus, the findings of a study of gay men and lesbian women may not apply to bisexuals or to transgender people, but including "B" and "T" in an acronym implies that they do. Throughout, we use the terminology most relevant to the described results or theory.

In our chapter, we use the term *gender identity* to refer to whether people identify as male, female, or another gender (Nadal, 2013); this term also describes whether people identify as masculine, feminine, androgynous, or neither (e.g., Rothblum et al., 2018). *Transgender people* believe the gender they were assigned at birth incorrectly or incompletely describes their true selves, whereas *cisgender people* are gender-conforming and do believe their birth gender accurately

reflects their gender identity (Lev, 2007). Heterosexual people experience emotional, romantic, and sexual attraction to members of the other biological sex. Individuals who identify as non-heterosexual are broadly classified as sexual minorities; within this category are homosexual people, who are emotionally, romantically, or sexually attracted to members of their own biological sex, and bisexual people, who may be attracted to members of the same or the other sex (American Psychological Association, 2008). However, it is important to recognize that some individuals do not place themselves in any of these categories. For example, some individuals may feel sexual attractions, have same-gender sexual fantasies, and/or engage in same-gender sexual relations but do not consider themselves gay, lesbian, or bisexual (Garnets, 2002; Greene, 1994). People may also choose different sexual identity labels to reflect their masculine or feminine roles, their status in a same-gender relationship, or their roles within sexual activities. Thus, for example, for pansexuals, attraction is not linked to another's gender identity (Belous & Bauman, 2017) and asexuals report having no sexual attraction to any genders (Bogaert, 2004). The fluid nature of this terminology is challenging but also broadens our understanding of minority group identity.

### **Cultural Influences on Sexual and Gender Identity Minorities**

As you have likely read throughout this book, culture is not an easy term to define. Because of its multifaceted nature, culture encompasses many different things at once. Definitions of culture typically include, at the very least, some mention or description of a social group's dynamics, rules, values, beliefs, norms, and behaviors (Matsumoto & Juang, 2013); it follows that people's attitudes toward the world around them exist within the framework of their culture. Because no two countries have an identical cultural makeup (Hofstede, 2001), people from different countries will differ in how they perceive different types of objects, people, and behavior.

Culture also reflects the beliefs and attitudes of the dominant group. This group is usually, but not always, the statistical majority; regardless, its members enjoy a privileged status. In contrast, individuals who differ from the dominant culture often experience prejudice and discrimination (Matsumoto & Juang, 2013). Heterosexuals are the dominant sexual orientation group and cisgender people are the dominant gender identity group. Individuals who differ from this norm—LGBTQAs—experience stigma because they violate the norms established by the majority and so are marked as "devalued, spoiled, or flawed in the eyes of others" (Crocker, Major, & Steele, 1998, p. 504). This stigmatized status is mirrored by the advantages, or privileges, enjoyed by majority group members. For example, heterosexuals are free to be open about their life or dating partner and need not fear that this disclosure will affect their employment status or incite interpersonal violence. Those advantages are discussed in detail by Kite, Togans, and Case (2018). It is important to recognize that

heterosexuals, including many who see themselves as allies, are often unaware of the protections that stem from their privileged status and so may not realize or acknowledge how their own actions and behaviors can negatively affect sexual and gender identity minorities (e.g., Case, 2013). One form these inequities take is in cultural level laws that reflect a bias in favor of the heterosexual and cisgender people.

#### Cultural-Level Laws

One way to gauge cross-cultural differences in attitudes toward sexual minorities is to examine legislative actions that affect people with minority status. To the best of our knowledge, these laws primarily address the rights of gay men and lesbian women; we are not aware of any legislative protection of transgender people. Our summary is based on the work of the International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA; Carroll & Mendos, 2009); this group surveyed and documented global laws concerning sexual orientation in those countries that are members of the United Nations (UN). These researchers found that almost twothirds of UN states (63%, N = 124 countries) have legislation that legalizes samesex sexual behavior; however, a significant percentage of UN states (37%, N = 71) have laws that make same-sex acts illegal. Of those 71 countries, 45% are African (N = 32) and 32% are Asian (N = 23); the remaining 23% are divided among the Americas (N = 10 countries) and Oceania (N = 6). For most of these 71 countries, the standard legal action for breaking these laws is imprisonment, but in a few countries (Iran, Saudi Arabia, Yemen, Sudan, Nigeria, and the southern provinces of Somalia), the death penalty can be applied.

There are also country-level differences in whether legislation prohibits global discrimination based on sexual orientation. Only 5% (N = 10) of UN countries have laws explicitly doing so: Bolivia, Ecuador, Fiji, Kosovo, Malta, Mexico, Nepal, Portugal, South Africa, and Sweden. However, accompanying this low rate of explicit comprehensive protection is a higher rate of laws protecting against employment discrimination; 37% (N = 72) of UN states provide this assurance for sexual minorities. The majority of those nations are European (N = 57) or are from the Americas (N = 17); the remaining states are African (N = 6), Asian (N = 4), or Oceanic (N = 5). Same-sex marriage has been formally legalized in only 12% of UN states (N = 22 countries); 20 of those are from the Americas (N = 7) or Europe (N = 13). An additional 15% (N = 28) have legalized same-sex civil unions. Legislation supporting joint adoption by same-sex couples remains rare—only 14% (N = 26) of countries have passed such laws. Finally, there are country-level differences in hate crime laws: In 23% (N = 43) of UN states, hate crimes based on sexual orientation are considered an aggravated circumstance, thus making these actions criminal. As with employment protection, these laws are most common in the Americas (N = 13) and Europe (N = 27) but hate crime legislation has also been passed in East Timor, New Zealand, and Samoa.

To provide a general index of where acceptance of homosexuality is more or less likely, we computed a country's rank order of attitudes toward homosexuality, based on data reported by Kelly (2001), the Pew Global Attitudes Project (PGAP, 2007), and Štulhofer and Rimac (2009). Table 20.1 shows the average rank for those countries that were included in at least two surveys; higher ranks indicated countries more accepting of homosexuality. Examining these data, along with the results described above, reveals trends across certain world regions, the most obvious being the consistent pattern of more progressive legislation in Western cultures such as the Americas and Europe; the analysis below suggests that acceptance is greater in North America and Western Europe rather than other parts of those continents. In contrast, legislative protections for sexual minorities are largely absent in Africa, Asia, and the Middle East. At one level, then, great strides have been made toward legalized protection for sexual minorities—two-thirds of the world's nations protect same-sex sexual behavior, for example. But viewed another way, laws protecting a sexual minority's right to marry, employment status, adoption rights, and safety from violence are absent in most UN nations. Thus, examining these trends offers a snapshot of where there is change and stagnation. Moreover, understanding legislative patterns can tell us about the attitudes of a country's citizens; for example, Kuntz, Davidov, Schwartz, and Schmidt (2015) found more positive attitudes toward sexual minorities in those countries with more progressive laws. There are, however, limits to this type of analysis because, when country-level laws are absent, there may be pockets of protections within regions, cities, or organizations. For example, in the U.S., 20 states have enacted laws promising workplace protection for sexual minorities and around 85% of U.S. Fortune 500 companies have stressed the importance of non-discriminatory human resources policies protecting LGB people (Human Rights Campaign Foundation, 2009). Therefore, to gain a nuanced overview of cross-cultural differences in attitudes toward sexual minorities, these laws should be considered in tandem with the results of social scientific research.

#### **Cross-Cultural Attitudes Toward Sexual Minorities**

As we noted earlier, attitudes toward sexual minorities are changing toward greater acceptance in many parts of the world. For example, there has been a remarkable degree of attitude change in Australia (Kelly, 2001), Canada, and the U.S. (e.g., Anderson & Fetner, 2008). Likewise, respondents to the U. S. General Social Survey have been more accepting of homosexuality over time (Hurley, 2005). These changes are especially noticeable in younger respondents; for example, Adamczyk and Pitt (2009) found that younger people were more accepting than were older cohorts across 33 countries and Kuntz et al. (2015) found a similar pattern in 27 countries from the European Social Survey.

Table 20.1 Average rank of country based on attitudes toward homosexuality

Country	Rank	
Lithuania	1	
Hungary	2	
Ukraine	3	
Latvia	4	
Bulgaria	5	
Russia	6	
Croatia	7	
Portugal	8	
Malta	9	
Chile	10	
Cyprus	11	
Poland	12	
Northern Ireland	13	
Belarus	14	
Japan	15	
USA	16	
Ireland	17	
Italy	18	
Slovenia	19	
Slovakia	20	
Finland	21	
Britain	22	
Belgium	23	
Austria	24	
France	25	
Czech Republic	26	
Germany	27	
Spain	28	
Luxemburg	29	
Denmark	30	
Iceland	31	
Sweden	32	
the Netherlands	33	

*Note.* For countries included in at least two surveys of nations (Kelly, 2001, Pew Global Attitudes Project, 2007, or Štulhofer & Rimac, 2009), average rank for attitudes toward homosexuality were computed. Higher numbers indicate countries with more positive attitudes.

Although the trend is toward progressive views, change is not happening everywhere. This can be seen in analyses of representative surveys conducted around the globe. For example, based on data from the European Social Survey, Donaldson, Handren, and Lac (2016) reported that citizens from Western European countries (e.g., Belgium, Denmark, France, Germany, Iceland, Ireland, the Netherlands,

Norway, Spain, Sweden, and the United Kingdom) had generally positive attitudes toward homosexuality, whereas citizens from Eastern European countries (e.g., Albania, Kosovo, Lithuania, Ukraine, and Russia) held less favorable views. Similarly, van den Akker, van der Ploeg, and Scheepers (2013) examined the attitudes of people from 20 European countries and found significant disapproval only in the Ukraine. However, positive attitudes are far from universal; in the most recent wave of the World Values Survey (2018), a majority reported homosexuality was justifiable in only seven of the 57 included countries (Australia, Germany, the Netherlands, New Zealand, Spain, Sweden, and Uruguay). The most negative views emerged in the Middle East (Qatar, Jordan), Western Asia (Azerbaijan, Armenia, Georgia), and Africa (Morocco, Tunisia). These findings dovetail with results from the Pew Global Attitudes Project (PGAP, 2014).

One strength of these cross-national surveys is that the researchers randomly selected respondents from a comprehensive set of nations, enhancing their generalizability. The findings from the World Values Survey (WVS) and the PGAP are also noteworthy because, unlike most international studies, the researchers cataloged attitudes in African and Middle Eastern countries—places where people are generally strongly opposed to homosexuality. This information is especially valuable as these populations are traditionally difficult to access and study. In most of these countries, fewer than 10% of respondents approved of homosexuality; exceptions were Israel, South Africa, and Lebanon, with 40, 32, and 18% of respondents being accepting of homosexuality, respectively.

Even so, there are limitations to these findings. First, respondents provide their views on a large number of social and political topics, with only one or two items addressing attitudes toward homosexuality (e.g., is it acceptable?) or homosexual behavior (e.g., is it wrong?). The extent to which bias, participant fatigue, or the perceived social sensitivity of the item influenced responses is thus unknown (Tourangeau, Rips, & Rasinski, 2000). The specific survey items also may or may not reflect people's views about civil rights or homosexuals as people. Drawing these distinctions is important because reviews of research conducted in the U.S. show that people are generally more negative about homosexual behavior than they are about homosexuals as people (Kite & Whitley, 1996; Whitley, Kite, Ballas, & Buxton, 2017); they are also less willing to deny sexual minorities basic civil rights than they are to disparage them as people or to denounce their sexual behavior (Herek, 2002). This raises the question of whether acceptance rates might be different if, for example, attitudes toward civil rights were assessed. However, even if this resulted in more positive views overall, it is unlikely that the pattern of differences across countries would substantially change. In support of this claim, in the WVS (2018), respondents indicated which social groups they would not want as a neighbor; the data on the percentage of people who list "homosexuals" shows patterns similar to those reported above.

Another limitation of the international survey data is that attitudes toward specific subgroups of sexual minorities—such as gay men, lesbian women,

or bisexual people—are not assessed. This is problematic because research consistently shows that beliefs about these subgroups differ markedly (Blashill & Powlishta, 2012) and that gay men are viewed more negatively than are lesbian women (e.g., Whitley et al., 2017). As noted earlier, transgender people and bisexuals are viewed more negatively than gay men and lesbian women (Norton & Herek, 2013), but questions about these social groups were not asked in the surveys we reviewed.

As with all cross-cultural data, it is important to consider that the items have been translated into the nation's language; doing so can compromise validity (Rogler, 1999). Back-translating items into the source language and then retranslating them can help mitigate this problem, but it does not guarantee that the items' original meaning is retained. More generally, the term "homosexual" might be interpreted differently in different countries. Finally, the responses to the surveys are self-report; in addition to the general limitations of such measures, research shows cross-cultural differences in response styles. For example, compared to people from Western cultures, those from Eastern cultures report greater ambivalence on Likert-type items (Hamamura, Heine, & Paulhus, 2008) and may acquiesce more (Smith, 2004); these findings raise the question of whether self-report data can be reliably compared cross-culturally.

# **Predictors of Attitudes Toward Homosexuality**

Researchers have identified a set of predictors of individuals' attitudes toward sexual minorities that appear to hold cross-culturally. Before we describe them, we caution against concluding that any of these relations are universal. Moreover, we cannot gauge whether any are better predictors of negative attitudes than others. The first factor we examined was interpersonal contact: individuals who report knowing a gay or lesbian person are generally more accepting of homosexuality. This relation emerged in a Puerto Rican sample (Bauermeister, Morales, Seda, & González-Rivera, 2007) and in samples of U.S. residents of Mexican descent (Herek & González-Rivera, 2006), Germans (Steffens & Wagner, 2004), Italians (Lingiardi, Falanga, & D'Augelli, 2005), and U.S. citizens (Herek & Capitanio, 1996). Another reliable predictor is level of education: That the more educated tend to be more accepting of homosexuality has been found for samples from Germany (Steffens & Wagner, 2004), Canada (Anderson & Fetner, 2008), and the U.S. (Herek, 2002; Herek & González-Rivera, 2006) and in studies of crossnational samples (e.g., Adamczyk & Pitt, 2009; Kelly, 2001; Kuntz et al., 2015).

Religion is another factor that differentiates between countries. Štulhofer and Rimac (2009) found higher levels of acceptance of homosexuality in European countries whose major religion was Catholic or Protestant rather than Eastern Orthodox. Adamczyk and Pitt (2009) found that people who lived in Catholic

(Canada, Puerto Rico, Mexico, Venezuela, Spain, Argentina, Peru, Chile, Uganda, and The Philippines) and Protestant (U.S., South Korea, South Africa, and Zimbabwe) majority countries were more likely to rate homosexuality as justified than those in Muslim majority countries (Nigeria, Egypt, Tanzania, Indonesia, Singapore, Bosnia, Bangladesh, Algeria, Albania, Kyrgyz Republic, Jordan, and Pakistan). However, people in these Muslim majority countries had similar attitudes toward homosexuality as those in Christian Orthodox (Moldova, Serbia, Montenegro, and Macedonia), Buddhist (Japan and Vietnam), and Hindu (India) countries.

Within countries, individuals with stronger religious beliefs, especially those from fundamentalist religions, are more negative toward gays and lesbians. Whitley (2009) found this relationship in a meta-analysis of 64 studies based on U.S. and Canadian samples. Cross-national studies indicated that church goers (Kelly, 2001) and those who perceived religion as personally important (Adamczyk & Pitt, 2009) were less tolerant of homosexuality. The relation between religiosity and sexual prejudice also emerged in samples from Canada (Anderson & Fetner, 2008; Hunsberger, Owusu, & Duck, 1999), Ghana (Hunsberger et al., 1999), Puerto Rico, (Bauermeister et al., 2007), and U.S. residents of Mexican descent (Herek & González-Rivera, 2006). People's personal religiosity influenced their negative attitudes toward homosexuality significantly more in self-expressive oriented countries, such as the U.S., than in survival-oriented countries, such as Zimbabwe (Adamczyk & Pitt, 2009).

When gender differences emerge, women are consistently found to be more accepting of homosexuality than are men. For example, Adamczyk and Pitt (2009) found this pattern across the 33 countries they studied. However, this gender difference is not universal; Kelly (2001) found larger gender differences in Scandinavian countries, Australia, Austria, France, Germany, Great Britain, and the U.S., but smaller, non-significant differences in Russia, Chile, and the Philippines. To explore this issue further, we calculated effect sizes for the 57 countries in the sixth wave of the WVS, using responses to the question of whether homosexuality can be justified. For the majority of countries, the effect size was small, but for a few countries there were notable gender differences (see Table 20.2). Women were more positive in three Asian countries (Japan, Pakistan, and Yemen), one African country (Libya), three European countries (Germany, the Netherlands, and Slovenia), one North American country (the United States), and two Oceanian countries (Australia and New Zealand). Men reported more positive attitudes in two Western Asian/Middle Eastern countries (Azerbaijan and Bahrain) and one African country (Algeria). Studies based on convenience samples also generally show men are more intolerant of homosexuality than are women (e.g., Anderson & Fetner, 2008; Lingiardi et al., 2005; Whitley et al., 2017), but they also show that heterosexual men are especially intolerant of gay men (Herek & González-Rivera, 2006; Kite & Whitley, 1996) whereas women evaluate these social groups similarly (Kite & Whitley, 1996) or are more negative toward lesbians (Herek & González-Rivera, 2006).

			•		
Country	Effect size	Country	Effect size	Country	Effect size
Azerbaijan	0.67	Ghana	-0.03	Colombia	-0.16
Algeria	0.35	India	-0.04	Taiwan	-0.16
Bahrain	0.21	Ecuador	-0.04	Brazil	-0.17
Malaysia	0.13	Uzbekistan	-0.04	Belarus	-0.18
Qatar	0.11	Lebanon	-0.05	Poland	-0.19
Rwanda	0.05	Armenia	-0.06	Sweden	-0.19
South Korea	0.03	Peru	-0.07	Libya	-0.23
Spain	0.03	Mexico	-0.07	Pakistan	-0.25
Jordan	0.02	Turkey	-0.07	the Netherlands	-0.25
China	0.02	Ukraine	-0.08	Estonia	-0.25
Singapore	0.00	Iraq	-0.08	Germany	-0.25
Hong Kong	0.00	Georgia	-0.08	Japan	-0.26
the Philippines	-0.01	Thailand	-0.09	Yemen	-0.33
Kazakhstan	-0.01	Russia	-0.10	Australia	-0.36
Nigeria	-0.01	Romania	-0.11	Slovenia	-0.43
Morocco	-0.02	Cyprus	-0.11	United States	-0.45
Tunisia	-0.02	Trinidad &	-0.11	New Zealand	-0.49
		Tobago			
Kyrgyzstan	-0.03	Uruguay	-0.14	South Africa	-0.03
Chile	-0.16	Zimbabwe	-0.03	Argentina	-0.16

Table 20.2 Gender differences in attitudes toward homosexuality across culture

*Note.* Effect sizes were computed for responses to the question "How justifiable is homosexuality?" from Wave 6 of the World Values Survey. Positive effect sizes indicate that men have a more positive attitude toward homosexuality than do women.

However, Bauermeister et al. (2007) found no gender difference in attitudes toward either gay men or lesbians in their Puerto Rican sample. The reasons for the "now you see it, now you don't" pattern of gender differences cross-culturally is unclear, but certainly deserves attention in future research.

# **Cross-Cultural Attitudes Toward Transgender People**

In recent years, awareness and understanding of transgender issues have increased, including evidence documenting the high rates of discrimination that people with a non-traditional gender identity experience (e.g., Clements-Nolle, Marx, & Katz, 2006). Unfortunately, greater attention to this issue has not changed transgender people's status as a chronically understudied population, even among LGBTQ-focused researchers. This lack of attention extends to cross-cultural research which, as noted earlier, has focused largely on perceptions of gay men and lesbian

women and their civil rights rather than taking a more expansive investigative approach (see Smith et al., 2014). Given this, our review provides only a limited snapshot and calls for more in-depth work in the future.

As noted earlier, attitudes toward transgender people are generally negative and the available evidence suggests this holds cross-culturally. However, on the positive side, some studies conducted in the United States show relatively accepting attitudes toward transgender youth specifically; for example, Elischberger, Glazier, Hill, and Verduzco-Baker (2018) found a disapproval rating below the scale midpoint on a measure of feelings about transgender youths. However, male-to-female transgender youth were rated more negatively than female-to-male transgender youth. Cross-culturally, limited research utilizing Asian samples has suggested that general attitudes toward transgender people vary by country. For example, many Asian cultures have been found to yield neutral to slightly positive attitudes toward transgender people, including more conservative countries such as Hong Kong (King, Winter, & Webster, 2009). The presence of gender pluralism in many Southeast Asian countries like Thailand (Winter, 2006) may be a contributing factor to these relatively accepting attitudes. However, Elischberger et al. (2018) found moderately negative attitudes toward transgender people in a sample of youth from India, despite the cultural presence of gender pluralism in that country.

The underlying motivation behind transprejudice—negative attitudes toward transgender people—is still under investigation, but the available research has shown that transprejudice is associated with sexual prejudice (Tebbe & Moradi, 2012) and that predictors of sexual prejudice also predict transprejudice. These include religiosity (Kanamori, Cornelius-White, Pegors, Daniel, & Hulgus, 2017; Worthen, Lingiardi, & Caristo, 2017), the pathologizing of gender identity variance, and endorsement of the gender binary (King et al., 2009). Political ideology has also consistently emerged as an important predictor of transphobia in both the United States and Europe (Worthen et al., 2017). In Canada (Hill & Willoughby, 2005), Spain (Carrera-Fernández, Lamerias-Fernández, Rodríguez-Castro, & Vallejo-Median, 2014), and Hong Kong (Winter, Webster, & Cheung, 2008), men hold more negative attitudes toward transgender people than do women.

Scholars have suggested that prejudice against transgender people may partly emerge out of ignorance, as many cultures foster an environment wherein transgender people feel the need to conceal their identity for their own safety and well-being. This creates a circular problem: A lack of societal representation and dialog about transgender issues promulgates myths and stereotypes about sexual identity minorities (Moran & Sharpe, 2004). This is important because breaking this invisibility, such as by having a panel of transgender people discuss their lives, can produce greater acceptance (Walch et al., 2012). Even so, the pockets of acceptance must be viewed in concert with the lived reality of discrimination, assault, and suicidality among transgender people (Moran & Sharpe, 2004). In this respect, the experiences of transgender people are similar to those of sexual minorities in important ways.

## **Experience of Discrimination among LGBT Populations**

As discussed in more detail below, a robust body of literature demonstrates that LGBT people experience high rates of psychological distress and suicidality compared with majority group members (see Gilman et al., 2001; Nadal, 2013). However, explaining the prevalence of mental disorders and negative health outcomes among LGBT populations has been a long, complicated process (Bailey, 1999). Historically, this discussion centered on people's identity as the causal factor, with inadequate attention given to factors outside the individual's control. Thus, a commonly held stereotype is that homosexuality is itself a mental illness—a view that, historically, has been strongly pushed by antigay activists. This was particularly true when homosexuality was classified as a mental disorder in the DSM (Mayes & Horwitz, 2005), but vestiges of this perspective remain today (Boysen, Vogel, Madon, & Wester, 2006).

### Minority Stress Model

In contrast to the view that the cause of distress lies within the person, contemporary psychologists now argue that these difficulties can be better explained by considering how objective events, such as microaggressions, bullying, and violence, can affect well-being—that is, stress can be internalized in ways that have damaging effects on well-being (Meyer, 2007). That minorities experience unique stress is captured by the minority stress model (MSM); this model begins by acknowledging that physical, mental, and emotional tension are part of everyone's lives and that, for everyone, environmental stressors and negative personal events have health consequences (Meyer, 2003). However, the MSM proposes that additional stressors are present for minority group members; these include both experiences of discrimination and the sheer knowledge or expectation that one will be discriminated against. Because LGBTs exist within a heterosexist and cissexist society, they are subject to the typical life stressors that affect everyone, but also to chronic stress because they are routinely exposed to stereotyping, discrimination, and prejudice that stem from their social group membership (Meyer, 2003).

The MSM further posits that these stressors are both proximal (e.g., perceived stigma and internalized homophobia) and distal (e.g., experiencing prejudice). Distal stressors consist of objectively identifiable events that occur throughout one's life, such as being bullied or insulted. Proximal stresses refer to the internalization of one's social environment, such as growing to expect negative interactions (e.g., hostility or social rejection) or coming to personally endorse negative social attitudes about one's own identity. The specifics of how these stressors manifest vary depending on how LGBT minority members are perceived by others externally and by how they internally perceive themselves and others (Meyer, 2007).

Regardless of their origins, these heightened degrees of stress are robustly related to negative health outcomes (Herek, Gillis, & Cogan, 1999). We now turn to a review of major stressors for LGBTs.

#### Bullying

Research on bullying in the general population has found that youths who are victimized by their peers often report feeling less accepted by others (Hugh-Jones & Smith, 1999) and exhibit more internalizing (Pellegrini, 1998) and externalizing (Williams, Connolly, Pepler, & Craig, 2005) behaviors relative to their non-victimized peers. When exploring which factors contribute to the likelihood of someone being bullied, existing sociocultural attitudes (e.g., stigma against those with low socioeconomic status or racial minorities) are thought to be strong predictors of which students will experience victimization (D'Augelli, Grossman, & Starks, 2006). Culturally, one highly relevant variable to consider is that people around the world typically endorse gender stereotypes and prescribe specific sexuality (e.g., compulsory heterosexuality) and gender-identity (e.g., cisgenderism) ideologies onto others; these messages begin for children at an early age (Poulin-Dubois, Serbin, Eichstedt, Sen, & Beissel, 2002).

In line with this, a growing body of literature has consistently documented that LGBT individuals who defy these cultural expectations are at an elevated risk of homophobic or transphobic bullying during secondary school and college (e.g., Guasp, Statham, Jadva, & Daly, 2012; Toomey, Ryan, Diaz, Card, & Russell, 2010). For example, a recent study found that approximately 55% of LGB people in the United Kingdom reported experiencing bullying as a result of their identity at some point during their academic career (Guasp et al., 2012). Similarly, Rivers and D'Augelli (2001) found that 60% of LGB students in the United States reported being assaulted and 82% identified as victims of homophobic remarks over a five-year period.

Homonegativism in educational bodies has been linked to myriad negative consequences in terms of individuals' personal and professional progression (Toomey et al., 2010). Specifically, both direct and indirect links have been established between LGBT people's psychosocial adjustment (e.g., depression or life satisfaction) and their experiences with bullying. Experiencing repeated negative responses from one's peers leads to negative feelings about the self and decreased overall well-being that persists well into adulthood (Ellis & Eriksen, 2002). Bullying of LGBT students negatively correlates with school attendance in the short term and with decreased educational and employment success in the long term (Rivers, 2000). The negative consequences of bullying of LGBT youths may be more severe than similar actions against majority group members because anti-LGBT sentiments are often continuous and emerge across a multitude of environments; this leads to the expectation of continued victimization. LGBTs are also likely to

internalize negative attitudes about their own sexual or gender identity based on these experiences, which consequently encompass their overall self-image (Herek, 2016; Robertson & Monsen, 2001). At present, although information about the prevalence of LGBT bullying outside of Western cultures is lacking, one might extrapolate that the trends documented in the Western world would either replicate or increase in magnitude in countries that exhibit less tolerance of LGBTs.

#### **Employment Discrimination**

Although the numbers are difficult to estimate, research suggests that around 10-14% of the United States workforce is comprised of LGB individuals (Powers, 1996). Of those individuals, around 60% have reported experiencing employment discrimination (National Gay and Lesbian Task Force Survey, 1991). Discrimination is higher for transgender people: 78% have reported at least one instance of identity-based harassment at work, with 47% reporting that they perceived being discriminated against at some point during the hiring, promotion, or retention process (Grant et al., 2011). Although contemporary analyses suggest that overt displays of workplace discrimination have lessened in recent years (Dovidio & Gaertner, 2000), it continues to manifest in subtle ways. Namely, LGBT identity disclosure in the workplace has been linked to increased instances of identity-based workplace bullying, lower pay relative to heterosexuals, and difficulties with career advancement; LGBT identity has also been correlated with corporate and noncorporate level hiring and termination decisions (Badgett & Frank, 2007). Likewise, prospective employers can engage in more discreet forms of discrimination against LGBTs, such as interacting less and ending interactions prematurely (Hebl, Foster, Mannix, & Dovidio, 2002).

Yet even as ongoing issues with discrimination linger in Western Europe and North America, their citizens have witnessed a growing respect for workplace diversity, as evidenced by the changes at the local, state, and organizational level described earlier in this chapter. In other parts of the world, however, the picture is bleaker. For example, in Turkey, narrative interviews conducted with LGB workers revealed perceptions of institutionalized homophobia that produce immense fears of abjection, status loss, assault at work, and job termination due to their identity (e.g., Ozturk, 2011). Similar negative workplace trends have been found in Jamaica and Singapore—countries where little legal or organizational support exists and where the social consequences of being a sexual minority are especially negative. As a result, these workers feel compelled to conceal their identities (White & Carr, 2005). However, withholding that one is a sexual or gender identity minority means hiding an important part of one's identity; even casual details about one's intimate relationships must be kept secret, creating stress and anxiety for minority group members (Day & Schoenrade, 2000). In addition, not revealing one's sexual minority status precludes opportunities to be accepted by others and the chance to be exposed to more positive messages about one's identity or to be part of a community of similar others. This also means that people are less aware of the protective strategies that could buffer against stigma.

#### Other Mental Health Outcomes

Overall, the prevalence of mental health disorders (e.g., depression, anxiety, substance abuse) among LGBT individuals is greater than that of the general population, with gay men and lesbians being about two and a half times more likely to have a mental disorder in their lifetime when compared to heterosexual men and women and being three times more likely to attempt suicide in their youth (Meyer, 2007). Certain subgroups within the LGBT community, such as bisexual and transgender people, are at even higher risk for negative mental health outcomes. For example, transgender people report high rates of suicidality (e.g., Haas et al., 2010). Bisexuals may face stigma from both the majority and the gay community; the former can be traced to bisexuals' lack of exclusive heterosexuality, whereas the latter may stem from their lack of exclusively same-gender attraction (Ochs, 1996). Likewise, it has been theorized that transgender individuals' mental health may be compromised due to the increased prevalence of social isolation, victimization, and open discrimination experienced by individuals with a gender identity that does not match the biological sex they were assigned at birth (Clements-Nolle et al., 2006).

These findings appear cross-culturally; for example, LGB youth in New Zealand were found to be 5–6 times more likely to report suicidality over their lifetime than heterosexuals (Fergusson, Horwood, & Beautrais, 1999); Australian LGBs also report high levels of psychological distress and suicidal thoughts (Lea, de Wit, & Reynolds, 2014). Similarly, even in cultures well known for their acceptance of LGBTs, such as the Netherlands, mental health problems are reported by those who experience identity-based discrimination (Kuyper & Fokkema, 2011). Research outside the Western world is limited, but there is little reason to expect cross-cultural differences in mental health outcomes. For example, South Indian men who engage in sex with other men display rates of depression three times higher than that of their country's general population (Safren et al., 2009). Taken together, it is evident that those who belong to the LGBT community are at a heightened risk of experiencing numerous negative mental health outcomes.

#### Conclusion

From our analysis of the existing literature, we see many reasons to be optimistic. Social change is in the air and the trend is clearly toward greater acceptance of sexual and gender identity minorities. But this optimism must be viewed in tandem

with the negative attitudes that prevail in many parts of the globe. Moreover, even in those societies where acceptance is relatively high, discrimination persists, ranging from fewer employment opportunities, lower pay, and reduced chances for advancement to interpersonal violence and even death. It remains to be seen whether past advances will continue or whether a backlash stalls progress for LGBTs.

Our analysis also reinforces two things: First, attitudes toward members of sexual and gender minority groups are often nuanced and largely context-dependent; as we have discussed, having accepting attitudes toward a social group is not synonymous with positive behavior toward its members. Thus, whether one engages in discriminatory behavior is only somewhat dependent on one's attitudes; contextual factors also strongly influence actions (Fiske, 2000). Second, findings from self-report data, which are subject to bias, may not accurately reflect either individual or cross-national attitudes. However, these limitations do not dampen our conclusion that LGBTs are far from universally accepted and, as a result, endure bullying, employment discrimination, and, more generally, poor mental health outcomes.

Our review also shows clear gaps in the literature; for example, we found no cross-cultural work addressing how bisexuals, queer, and asexual people are viewed. Similarly, cross-cultural perspectives on the lives and experiences of transgender people are in their infancy. More generally, although our understanding of prejudice toward LGBTs has advanced, further work is needed to fully understand the origins and outcomes of this bias. Finally, as is true for most psychological research, a bias toward studying populations from the United States and Western Europe is evident (Arnett, 2008) and this clearly colors our conclusions. Not so long ago, however, these criticisms and limitations would scarcely have been considered. That the questions are now beginning to be asked is yet another reason for optimism about progressive social change.

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# Part VIII

# Health, Disorders, and Treatment

Health—what it is and its experience by individuals in any particular culture—may seem obvious to most people. Yet there is surprising diversity in the ways that different cultures define and conceptualize health. Is health simply the absence of disease? Does health imply a broad, holistic notion of balance in a person's life? Researchers working in a number of scholarly fields have produced an interdisciplinary understanding of health, especially in non-Western cultures and their perceptions of well-being. Clearly, the Western biomedical understanding is not the only view of health and illness in the world.

A number of different kinds of healers play central roles in evaluation, diagnosis, and treatment across cultures. Differing philosophies, religious influences, use of such natural substances as medicinal plants, and Western medicines all have a role in the definition and maintenance of health.

Culture is also significant in the conceptualization of mental health—in both diagnosis and treatment. Researchers recognize the importance of integration of cultural sensitivity with the need for empirically verifiable treatments in the realm of mental health, and investigators have given attention to the special mental health challenges of indigenous populations. And, as in other areas of cross-cultural interest, some aspects of treatment may be universally applicable, while others are clearly culture-specific.

# Cultural Influences on Health

# Regan A. R. Gurung

Our cultural backgrounds have a significant influence on how healthy we are, what we do to stay healthy, and what we do when we are sick. For those us raised in the Western world, there is an easy way to determine health. If we do not experience pain, are disease-free, are at the right weight, and are not partaking in any obviously unhealthy behaviors (e.g., smoking, binge drinking) we feel confident in claiming we are healthy. The World Health Organization (WHO) describes health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1946, p. 100). What is not clear from this definition, and completely missing from the idea of health as just "the absence of disease" is the fact that health can vary according to your race, whether you are Asian (Suchday, Grujisic, & Feher, 2019) or African American (Edwards et al., 2019), where you live, how old you are (Emery, Landers, & Shoemake, 2019), what your parents and friends think constitutes health (Gurung, 2019), what your religious or ethnic background is (Von Dras, 2017), and what a variety of other factors indicate about you. The one word that nicely captures all these different elements that influence health is culture.

It is important to understand the role of culture in physical and mental health in today's global climate. Mental and physical health vary dramatically across cultural groups (Gurung, 2019). Not only is the world diverse, but every state, city, and county is becoming increasingly more diverse. Both the objective indicators of physical health and the subjective nature of defining abnormality vary with culture, making an understanding of how culture impacts perceptions, conceptualizations, and treatment of health crucial. There are critical cultural variations in the conceptualization, perception, health-seeking behaviors, assessment, diagnosis, and

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treatment of abnormal behaviors and physical sickness. This chapter focuses on how different cultural approaches to health shape healthy behaviors, prevent illness, and enhance our health and well-being.

#### What Is Culture?

Culture is varied, multilayered, and complex. A given individual may be a part of many different cultural groups, and some of those groups may have a larger influence on her health than others. Many people use the words *culture*, *diversity*, *ethnicity*, and *race*, as if they mean the same thing. Beyond these specific examples, people also think culture represents a set of ideals or beliefs or sometimes a set of behaviors, both of which are accurate components of what culture is. Although we rarely acknowledge it, culture has many dimensions. Keith (Chapter 1 in this volume) has already nicely reviewed definitions of culture. It is important to remember that culture can also include similar physical characteristics (e.g., skin color), psychological characteristics (e.g., levels of hostility), and common superficial features (e.g., hair style and clothing). The most commonly described objective cultural groups consist of grouping by ethnicity, race, sex, and age.

Two of the most important health-related aspects that define cultural groups are *socioeconomic status* (SES) (Ruiz, Steffen, Doyle, Flores, & Price, 2019) and *sex* (Rosenthal & Gronich, 2019). Although sex (and, relatedly, gender) have found a place in curricula for some time now (e.g., gender studies, human sexuality classes, women's studies), SES has only recently begun to be better incorporated into curricula. The poor make up a large percentage of Americans without health insurance, and SES is related to a higher occurrence of most chronic and infectious disorders and to higher rates of nearly all major causes of mortality and morbidity (Ruiz et al., 2019). Currently, nearly 40% of the country's wealth is owned by just 1% of the population with over 75% of the aggregate wealth owned by 10% of the population. Research has shown that SES is associated with a wide array of health, cognitive, and socioemotional outcomes, with effects beginning before birth and continuing into adulthood (Gottfried, Gottfried, Bathurst, Guerin, & Parramore, 2003) and is correspondingly a critical aspect of culture to be aware of.

Given the wide array of definitions of culture, it should come as no surprise that culture and its influences on life and health are studied by a number of different disciplines. For example, medical anthropologists are individuals who are committed to improving public health in societies in economically poor nations. Based on the biological and sociocultural roots of anthropology, medical anthropologists have long considered health and medical care within the context of cultural systems, although not necessarily using the tools or theoretical approaches of psychologists. That said, medical anthropology has paid more explicit attention to non-Western approaches to health and healing than mainstream psychology

(Winkelman, 2009). In a related fashion, medical sociologists work within the framework of the medical model, focusing on the role of culture and a person's environment in health and illness. No one discipline is enough. In fact, the complex interaction of cultural influences and health necessitates an interdisciplinary approach to studying their relations and working toward elimination of health disparities (Anderson, 2009).

# Cultural Variations in Health: Health Disparities

Health disparities are "differences in health that are not only unnecessary and avoidable, but in addition, are considered unfair and unjust" (Whitehead, 1992, p. 433). There are many examples of disparities, for example, the infant death rate among African Americans is still more than double that of European Americans, and heart disease death rates are more than 40% higher for African Americans than for European Americans (U.S. Department of Health and Human Services, 2018). In general, health care, mental health, and disease incidence (e.g., tuberculosis) rates also vary significantly across ethnic groups. Thus, the suicide rate among American Indians is 2.2 times higher than the national average (Centers for Disease Control and Prevention, 2015), and those living below the poverty level are significantly more depressed that those higher in SES (Ruiz et al., 2019).

The fact that there are differences in health behaviors and health in general has not escaped the notice of the American government, funding agencies, or health psychology researchers (the latter can do research to better the support of the first two). In fact, the Healthy People 2020 project (U.S. Department of Health and Human Services, 2018), identified elimination of health disparities as one of its two overarching goals (the other is increasing the number and quality of years of life). In parallel, the American Psychological Association (APA) has also worked hard toward the elimination of racial and ethnic disparities in health access and outcomes through an increased commitment to behavioral and biomedical research, improved data systems, culturally competent health care delivery, and efforts to increase public awareness of the existence of health disparities and the resources that are available to improve minority health outcomes (American Psychological Association, 2009, para. 1).

APA's Office of Ethnic Minority Affairs released a special issue of its journal *Communique* in March 2009, focusing on psychological and behavioral perspectives on health disparities. APA's Division 38 (Health Psychology) has developed a Health Disparities webpage which introduces the key issues in health disparities research and provides resources to further aid research into this topic. As described on the webpage, the "overarching goals are to advance the understanding of (1) the nature and scope of health disparities and (2) the scientific study of health disparities, from description to intervention" (https://www.apa.org/topics/health-disparities/

index.aspx APA, 2018, para. 2). Research specifically aimed at reducing health disparities, including interventions to reach out to negatively influenced parties, is underway and holds promise for major improvements. The American government has also created cultural competency standards (National Standards for Culturally and Linguistically Appropriate Services, CLAS,) with its webpage "Think Cultural Health," https://www.thinkculturalhealth.org), with corresponding training resources designed to help health care practitioners better serve patients from diverse populations. Where do these disparities spring from? There are many answers and a good start is to look to varying approaches to health.

### **Cultural Variations in Approaches to Health**

In most of the countries around the globe, health is understood using either the Western evidence-based medical approach or traditional indigenous approaches (Prasadarao, 2014). In traditional systems, a wide range of practitioners provides help. For example, in Sub-Saharan Africa, four types of traditional healers provide health care, namely: (a) traditional birth attendants; (b) faith healers; (c) diviners and spiritualists; and (d) herbalists.

On a global level, health beliefs and practices are closely tied to religion and the country the religion is predominant in—components of culture (i.e., religion and nationality) not given enough attention in Western medicine. In predominantly Hindu countries such as India, for example, modern medical practitioners are complemented by three types of traditional healers—*vaids* (healers practicing indigenous systems of medicine), *mantarwadis* (healers using astrology and charms for cure), and *patris* (healers who act as mediums for spirits and demons)—who offer treatment to physical and mental illness in rural villages of India (Agnihotri & Agnihotri, 2017). The *vaids* believe that illness is due to "an imbalance between the natural elements" brought forth by environmental factors, certain diets, uninhibited sexual indulgence, and the influence of demons (Prasadarao, 2009, p. 153). These factors cause "excess heat, cold, bile, wind or fluid secretions" leading to the development of physical and mental illness. In Muslim countries, such as Pakistan, traditional healers include *khalifs*, *gadinashins*, *imams*, *hakims*, and others who practice magic and sorcery (Karim, Saeed, Rana, Mubbashar, & Jenkins, 2004).

Long before there were medical degrees, hospitals, clinics, and pharmaceuticals, people were getting sick and receiving treatment. Yes, many of those treated by early healers and healing practices did not survive the treatment, let alone recover from the illness itself. This notwithstanding, people around the world have worked from the beginning of recorded history (and before) to prolong life and alleviate suffering from illness. There are three or four major philosophical approaches to health and healing that illustrate cultural differences in health. The one we may be most familiar with (and consequently, one I touch on only briefly) is referred to as

conventional medicine, or *allopathy*. Western biomedicine is probably the most dominant form of health care in the world today. Hallmarks of this approach are an increasing reliance on technology and the use of complex scientific procedures for the diagnosis and treatment of illness. Treatments using this approach are designed to produce an opposite effect to that created by the disease. If you have a fever, you are prescribed medication to reduce the temperature. Western biomedicine views the body as a biochemical machine with distinct parts. Often called reductionist, Western biomedicine searches for the single smallest unit responsible for the illness.

#### Traditional Chinese Medicine

Traditional Chinese medicine (TCM) is probably used to treat more people than any other form of medicine. Even in North America, there are a large number of TCM schools and practitioners. In fact, acupuncture, one form of TCM, is covered by most health insurance policies. Two main systems categorize the forces identified in TCM that influence health and well-being: yin and yang and the five phases. According to one Chinese philosophy, all life and the entire universe originated from a single unified source called Tao. The main ideas about the Tao are encompassed in a 5,000-word poem called the Tao Te Ching written about 2,500 years ago. In TCM, health is the balance of the vin and yang, the two complementary forces in the universe. Yin and yang are mutually interdependent, constantly interactive, and potentially interchangeable forces. In TCM, 10 vital organs are divided into five pairs, each consisting of one "solid" yin organ and one "hollow" yang organ. TCM practitioners believe that the vin organs—the heart, liver, pancreas, spleen, kidneys, and lungs—are more vital than the yang organs, and dysfunctions of yin organs cause the greatest health problems. The yang organs are the gallbladder, stomach, small intestine, large intestine, and bladder (though an organ translated as "triple burner" is also said to exist). A healthy individual has a balanced amount of yin and yang. If a person is sick, his or her forces are out of balance (Santee, 2017).

The yin and yang are often translated into hot and cold (two clear opposites), referring to qualities and not temperatures. To be healthy, what you eat and drink and the way you live your life should have equal amounts of hot qualities and cold ones. Balancing hot and cold is a critical element of many different cultures (e.g., Chinese, Indian, and even Mexican), although the foods that constitute each may vary across cultures. Some "hot" foods include beef, garlic, ginger, and alcohol. Some 'cold' foods include honey, most greens, potatoes, and some fruits (e.g., melons, pears).

The five phases or elemental activities refer to specific active forces and illustrate the intricate associations that the ancient Chinese saw between human beings and nature. Energy or *qi*, another critical aspect of TCM, moves within the body in the

same pattern as it does in nature with each season and with different foods helping to optimize energy flow within the body. The five elements of wood, fire, earth, metal, and water each link to a season of the year, a specific organ, and a specific food. Each element has specific characteristics, is generated by one of the other forces, and is suppressed by another. For example, wood generates fire that turns things to earth that forms metals. The heart is ruled by fire, the liver by wood, and the kidneys by water. Fire provides qi to the heart and then passes qi onto the earth element and correspondingly the stomach, the spleen, and pancreas. What you eat correspondingly can influence your different organs and your well-being in general (Santee, 2017).

#### Ayurveda: Indian Health Beliefs

Ayurveda, a traditional Indian holistic system of medicine was developed by Charaka about 2,600 years ago (Suchday, Ramanayake, Benhoukha, Santoro, Marquez & Nakao, 2014). Charaka described four causative factors in mental illness: (a) diet (incompatible, vitiated, and unclean food); (b) disrespect to gods, elders, and teachers; (c) mental shock due to emotions, such as excessive fear and joy; and (d) faulty bodily activity. Thus, Ayurveda considers a biopsychosocial approach in formulating causative factors in mental disorders. Charaka, while emphasizing the need for harmony between body, mind, and soul, focused on preventive, curative, and promotive aspects of mental health. Ancient Indian court physicians further developed Ayurvedic practices and were given vast resources because the health of the king was considered equivalent to the health of the state (Svoboda, 2004). The use of Ayurveda flourished until 900 C.E., when Muslim invaders came into India and created a new form of medicine called Unani, a combination of Greek and Ayurvedic medicine with Arabic medicine (Udwadia, 2000). The use of plants and herbal remedies plays a major part in Ayurvedic medicine. About 600 different medicinal plants are mentioned in the core Ayurvedic texts. Western drug companies have used a number of plants originally used in India to cure diseases. For example, psyllium seed is used for bowel problems, and other plants are used to reduce blood pressure, control diarrhea, and lessen the risk of liver or heart problems. A substance called forskolin, isolated from the Coleus forskohlii plant, has been used in Ayurveda for treating heart disease, and its use has now been empirically validated by Western biomedicine (Ding & Staudinger, 2005).

TCM and Ayurveda share many basic similarities. Ayurvedic science also uses the notion of basic elements: Five great elements form the basis of the universe. Earth represents the solid state, water the liquid state, air the gaseous state, fire the power to change the state of any substance, and ether, simultaneously the source of all matter and the space in which it exists. Each of these elements can nourish the body, balance the body (serving to heal), or imbalance the body (serving as a poison). Achieving the right balance of these elements in the body is critical to

maintaining a healthy state. These elements also combine to form three major forces (doshas) that influence physiological functions critical to healthy living (Agnihotri & Agnihotri, 2017). Ether and air combine to form the vata dosha, fire and water combine to form the pitta dosha, and water and earth elements combine to form the kapha dosha. Vata directs nerve impulses, circulation, respiration, and elimination. Pitta is responsible for metabolism in the organ and tissue systems as well as cellular metabolism. Kapha is responsible for growth and protection. We are all made up of unique proportions of vata, pitta, and kapha that cause disease when they go out of balance. These three doshas are also referred to as humors or bodily fluids and correspond to the Greek humors of phlegm (kapha) and choler (pitta). There is no equivalent to the Greek humor blood, nor is vata or wind represented in the Greek system. Similar to the meridians in TCM, the existence of these forces is demonstrated more by inference and results of their hypothesized effects than by physical observation. Vata, pitta, and kapha are also associated with specific body-type characteristics (Svoboda, 2004).

#### Mexican American/Latino Health Beliefs

Curanderismo is the Mexican American folk-healing system that often coexists side by side with Western biomedicine (Tovar, 2017). Coming from the Spanish verb curar meaning "to heal," curanderos are full-time healers. The curandero's office is in the community, often in the healer's own home. There are no appointments, forms, or fees, and you pay whatever you believe the healer deserves. This form of healing relies heavily on the patient's faith and belief systems and uses everyday herbs, fruits, eggs, and oils. In studies beginning as early as 1959, researchers first focused on "Mexican American cultural illnesses," such as mal de ojo (sickness from admiring a baby too much). More recent work (e.g., Tovar, 2017) focuses on the healers themselves, their beliefs, training processes, and processes for treatment. Surveys of Mexican Americans show that even among highly assimilated Mexican Americans, traditional and indigenous practices still persist.

The Mexican American cultural framework acknowledges the existence of two sources of illness, one natural and one supernatural (Arellano-Morales, & Sosa, 2018). When the natural and supernatural worlds exist in harmony, optimal health is achieved. Disharmony between these realms breeds illness. Beyond this supernatural balance component, the *curandero's* concept of the cause of illness parallels that of Western biomedicine. Like biomedical practitioners, *curanderos* believe that germs and other natural factors can cause illness. However, *curanderos* believe that there are supernatural causes to illness in addition to natural factors. If an evil spirit, a witch, or a sorcerer causes an illness, then only a supernatural solution will be sufficient for a cure. Illness can also result if a person's energy field is weakened or disrupted. Whether diabetes, alcoholism, or cancer, if a spirit caused it, supernatural intervention is the only thing that can cure it.

Unlike Western biomedicine and TCM, the practices of *curanderismo* are based on Judeo-Christian beliefs and customs. The Bible has influenced *curanderismo* through references made to the specific healing properties of natural substances such as plants (see Luke 10:34). *Curanderos*' healing and cures are influenced by the Bible's proclamation that belief in God can and does heal directly and that people with a gift from God can heal in his name. The concept of the soul, central to Christianity, also provides support for the existence of saints (good souls) and devils (bad souls). The bad souls can cause illness and the good souls, harnessed by the shamanism and sorcery of the *curanderismo*, can cure.

Curanderos use three levels of treatment depending on the source of the illness: material, spiritual, and mental (Arellano-Morales, & Sosa, 2018). Working on the material level, curanderos use things found in any house (eggs, lemons, garlic, and ribbons) and religious symbols (a crucifix, water, oils, and incense). These material things often are designed to either emit or absorb vibrating energy that repairs the energy field around a person. Ceremonies include prayers, ritual sweepings, or cleansings (Torres & Sawyer, 2005). The spiritual level of treatment often includes the curandero entering a trance, leaving his or her body, and playing the role of a medium. This spiritual treatment allows a spirit to commandeer the curandero's body, facilitating a cure in the patient. On some occasions, the spirit will prescribe simple herbal remedies (via the curandero). On other occasions, the spirit will perform further rituals. The mental level of treatment relies on the power held by the individual curandero, rather than on spirits or materials. Some illnesses (e.g., physical) often are treated by herbs alone (DeStefano, 2001), and psychological problems may be treated by a combination of all these types of treatments.

In a manner akin to that of health psychologists, *curanderos* explicitly focus on social, psychological, and biological problems (Arellano-Morales, & Sosa, 2018). The difference is that they add a focus on spiritual problems as well. From a social perspective, the community where the *curanderos* work recognizes and accepts what the *curandero* is trying to achieve. The social world is important to the *curanderos*, who evaluate the patient's direct and extended support system. The patient's moods and feelings are weighed together with any physical symptoms. Finally, there is always a ritual petition to God and other spiritual beings to help with the healing process.

Curanderos each have their own set of specializations. For example, midwives (parteras) help with births, sobaderos treat muscle sprains, and herbalists (yerberos) prescribe different plants (Avila & Parker, 2000). For most Mexican Americans, the choice between curanderismo and Western biomedicine is an either/or proposition. Some individuals use both systems, and some stay completely away from Western hospitals as much as they can, sometimes because they do not have enough money to use them. Acculturated and higher social class Mexican Americans tend to rely exclusively on Western biomedicine. Nevertheless, the existence of this strong cultural and historical folk medicine and the large numbers of its adherents make this approach to illness an important alternative style for us to consider in our study of the psychology of health.

#### American Indian Health Beliefs

Many elements of the American Indian belief system and the approach to health are somewhat consistent with elements of *curanderismo* and TCM and provide a strong contrast to Western biomedicine (King, 2017). Although different tribes have different variations on the basic beliefs, four practices are common to most (Cohen, 2003): the use of herbal remedies, the employment of ritual purification or purging, the use of symbolic rituals and ceremonies, and the involvement of healers, also referred to as medicine men, medicine women, or shamans (though the latter is primarily used for the healers of northern Europe; Eliade, 1964). Native Americans have utilized and benefited from these practices for at least 10,000 years and possibly much longer.

Similar to the ancient Chinese, American Indians believed that human beings and the natural world are closely intertwined. The fate of humankind and the fate of the trees, the mountains, the sky, and the oceans are all linked. The Navajos call this "walking in beauty," a worldview in which everything in life is connected and influences everything else. In this system, sickness is a result of things falling out of balance and of losing one's way in the path of beauty (Alvord & Van Pelt, 2000). Animals are sacred, the winds are sacred, and trees and plants, bugs, and rocks are sacred. Every human and every object correspond to a presence in the spirit world, and these spirits promote health or cause illness. Spiritual rejuvenation and the achievement of a general sense of physical, emotional, and communal harmony are at the heart of Native American medicine. Shamans coordinate American Indian medicine and inherit the ability to communicate with spirits in much the same way that Mexican American curanderos do. Shamans spend much of their day listening to their patients, asking about their family and their behaviors and beliefs and making connections between the patient's life and their illness. Shamans do not treat spirits as metaphors or prayers as a way to trick a body into healing. Shamans treat spirits as real entities, respecting them as they would any other intelligent being or living person.

Ritual and ceremony play a major role in American Indian medicine. One of the most potent and frequent ceremonies is the sweat lodge (Harris, 2017; Mehl-Medrona, 1998). Medicine men hold lodges or "sweats" for different reasons. Sometimes a sweat purifies the people present; at other times a sweat is dedicated to someone with cancer or another terminal illness. The ceremony takes place in a sweat lodge, which looks like a half dome of rocks and sticks covered with blankets and furs to keep the air locked in and the light out. The lodge symbolizes the world and the womb of Mother Earth. Heated rocks are placed in a pit in the middle of the half dome. Participants in the sweat sing sacred songs in separate rounds during the ceremony. After each round, a firekeeper brings in another set of hot rocks, and more songs are sung or prayers said. The sequence of prayers, chants, and singing following the addition of hot rocks continues until all the rocks are brought in. The hot stones raise the temperature inside the lodge, leading to

profuse perspiration, which is thought to detoxify the body. Because of the darkness and the heat, participants often experience hallucinations that connect to spirit guides or provide insight into personal conditions.

Other ceremonies are also used. For example, the Lakota and Navajo use the medicine wheel, the sacred hoop, and the sing, which is a community healing ceremony lasting from 2 to 9 days and guided by a highly skilled specialist called a singer. Many healers also employ dancing, sand painting, chanting, drumming (which places a person's spirit into alignment with the heartbeat of Mother Earth), and feathers and rattles to remove blockages and stagnations of energy that may be contributing to ill health. Sometimes sacred stones are rubbed over the part of the person's body suspected to be diseased. Although many American Indians prefer to consult a conventional medical doctor for conditions that require antibiotics or surgery, herbal remedies continue to play a substantial role in treatment of various physical, emotional, and spiritual ailments. The herbs prescribed vary from tribe to tribe, depending upon the ailment and which herbs are available in a particular area. Some shamans suggest that the herbs be eaten directly. Others suggest taking them mixed with water (like a herbal tea) or even with food. Healers burn herbs such as sage, sweet grass, or cedar (called a smudge) in almost every ceremony and let the restorative smoke drift over the patient.

#### African American Folk Medicine

In addition to these four basic approaches to health, there is also a wealth of other belief systems. One group not discussed as often as those above is African Americans. For many members of this cultural group, health beliefs reflect cultural roots that include elements of African healing, medicine of the Civil War South, European medical and anatomical folklore, West Indies voodoo religion, fundamentalist Christianity, and other belief systems (Wendorf & Bellegarde-Smith, 2014).

African American communities have become very diverse, especially with the recent arrival of people from Haiti and other Caribbean countries and Africa. Similar to American Indians, many people of African descent also hold a strong connection to nature and rely on *inyangas* (traditional herbalists). Even today in Africa, hospitals and modern medicines are invariably the last resort in illness. Members of some traditional African tribes seek relief in the herbal lore of the ancestors and consult the *inyanga*, who is in charge of the physical health of the people (Branford, 2005). When bewitchment is suspected, which happens frequently among the traditional people of Africa, or there is a personal family crisis or love or financial problem, the patient is taken to a *sangoma* (spiritual diviner or spiritual/traditional healer), who is believed to have spiritual powers and is able to work with the ancestral spirits or spirit guides (Branford, 2005). The *sangoma* uses various methods such as "throwing the bones" (*amathambo*, also known by other

names depending on the cultural group) or going into a spiritual trance to consult the ancestral spirits or spirit guides to find the diagnosis or cure for the problem, be it bewitchment, love, or other problems. Depending on the response from the higher source, a decision will be made on which herbs and mixes (*intelezis*) should be used and in what manner (e.g., orally, burning). If more powerful medicine is needed, numerous "magical rites" can or will be performed according to rituals handed down from *sangoma* to *sangoma* (Branford, 2005). In South Africa, there are more than 70,000 *sangomas* or spiritual healers who dispense herbal medicines and even issue medical certificates to employees for purposes of sick leave.

Many African Americans believe in a form of folk medicine that incorporates and mirrors aspects of voodoo (traditionally spelled "vodou"), which is a type of religion derived from some of the world's oldest known religions that have been present in Africa since the beginning of human civilization (Wendorf & Bellegarde-Smith, 2014). When Africans were brought to the Americas (historians estimate that approximately 650,000 slaves were imported by the 1680s), religious persecution forced them to practice voodoo in secret. To allow voodoo to survive, its followers adopted many elements of Christianity.

Today, voodoo is a legitimate religion in a number of areas of the world, including Brazil, where it is called *Candomblé*, and the English-speaking Caribbean, where it is called *Obeah*. In most of the United States, however, white slavers were successful in stripping slaves of their voodoo traditions and beliefs (Heaven & Booth, 2003). In some parts of the United States the remnants are stronger than in others. Some African American communities in isolated areas such as the coast and islands of North and South Carolina, survived intact well into the twentieth century. Here, *Gullah* culture, involving belief in herbalism, spiritualism, and black magic, thrived (Pinckney, 2003). What was called voodoo in other parts of the country was called "the root" (meaning charm). A number of other cultures, such as the American Indians described earlier and Hmong Americans, continue to believe that shamans and medicine men can influence health. Although shamanistic rituals and voodoo rites may seem to be ineffectual ways to cure according to Western science, the rituals have meaning to those who believe in them and should not be ignored or ridiculed.

#### **But Does It Work?**

Many of the approaches described above may sound like folk medicine without any scientific basis. If you have never heard of them, you may wonder if they actually work. To take a truly culturally relativistic perspective (versus a biased ethnocentric perspective where one's own culture is always better), the simple answer is "in many cases, yes" Indeed there are many anecdotal reports of the efficacy of the different cultural approaches to health described above. There is even a growing

body of scientific evidence for many of the different treatments and approaches described (for a full review, see Gurung, 2019). For example, much of the research conducted on TCM in America analyzes the constituents of herbs used in treatment, and many such studies show that the active ingredients of the herbs facilitate cures (Hon et al., 2007). Similarly, the Ayurvedic use of forskolin for treating heart disease has now been empirically validated by Western biomedicine (Suchday et al., 2014).

#### **Culture and Mental Health**

Culture influences how individuals manifest symptoms, communicate their symptoms, and cope with psychological challenges, and their willingness to seek treatment (Eshun & Hodge, 2014). Understanding the role of culture in mental health is crucial to comprehensive and accurate diagnoses and treatment of illnesses. A number of frameworks have been used to understand cultural influences on mental health including the sociobiological, ecocultural, and biopsychosocial perspectives (Gurung & Revenson, 2019). Another perspective that has become increasingly important in our postmodern world, with much migration and resettlement, is multiculturalism. It literally means many cultural views. It is a view that emphasizes importance, equality, and acceptance for all cultural groups within a society, and supports a strong desire to increase awareness about all groups to the benefit of the society as a whole (see Mio, Barker-Hackett, & Tumambing, 2006, for a review).

Overall epidemiological, clinical, and other studies suggest a "moderate but not unlimited impact of cultural factors" on mental health (Draguns, 1997, p. 213). This implies that accurate evaluation and diagnoses of psychological disorders within the bounds of culture are crucial for appropriate and effective treatment and intervention (Eshun & Hodge, 2014). However, despite efforts in the field of counseling and clinical psychology to include or emphasize cultural influences on psychopathology in our traditional training programs, we are still limited in the depth and breadth of material available.

It is beyond the scope of this chapter to offer an in-depth review of the literature on culture and mental health, but I will briefly review some of the key issues involved. For example, it is important to remember that culture influences the client as well as the therapist. One needs also to focus on a wide range of processes: conceptualization, perception, health-seeking behaviors, assessment, diagnosis, and treatment, in the context of cultural variations. We need to consider issues related to reliability, validity, and standardization of commonly used psychological assessment instruments among different cultural groups, and the role of factors such as religion and stress as they relate to culture. It is also important to look at a bigger picture, focusing on psychotherapy in a culturally diverse world

(see Chapter 1, this volume), and to international perspectives on mental health (Prasadarao, 2014). Even specific disorders, such as eating disorders, mood disorders, anxiety disorders, post-traumatic stress disorder, and psychotic disorders, vary by culture (Eshun & Gurung, 2009). There are cultural differences and/or similarities in the symptoms reported, as well as the possibility of misdiagnosing mental illness among people who focus on specific symptoms (e.g., somatic) and less on others for varying reasons.

#### Conclusion

One of the most pressing needs for cross-cultural psychology is to spend more time and energy on examining how cultural differences influence health and behavior. There is a strong emphasis for academic curricula to be culturally diverse (Keith, 2018), so why has there not been enough cultural research? The limited focus on cultural differences arises from a number of different factors. Mainstream psychology has tended to be blind to culture, not so much because of some explicit prejudice—although some (e.g., Guthrie, 2003) have argued that the primarily European American male researchers were biased—but because of the belief that there are commonalities to human behavior that transcend culture. Conceivably a function of its own individualistic bias, mainstream psychology has only recently begun to consider the theoretical and practical implications of a focus on the collective context—the family, peers, community, and culture, of the individual.

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# Perspectives of Psychopathology Across Cultures and Among Indigenous Societies

Josephine C. H. Tan

The field of clinical psychology has been shaped primarily by European and American researchers (Daughtry, Keeley, Gonzales, & Peterson, 2016; Leong, Pickren, & Tang, 2012). To this day, it largely retains its Western views. However, substantial attempts to investigate cultural factors in clinical psychology have resulted in an emerging field called cultural-clinical psychology (Ryder, Ban, & Chentsova-Dutton, 2011). Psychopathology is thus viewed as a social and cultural construct which shapes how people across different cultures experience clinical disorders and psychological distress, how psychopathology is detected and understood, and how it is treated.

In this chapter I discuss the approaches that have been taken to understand the link between culture and psychopathology. I will also present an examination of the indigenous psychologies and issues associated with attempts to situate them within the current state of the field. Finally, I will discuss challenges and opportunities facing the field.

# **Approaches to Cultural-Clinical Psychology**

There are two broad approaches in the field of cultural-clinical psychology: universality and relativism (Canino & Alegría, 2008; Mena & Joseph, 2017).

## Universality

The universality (*etic*) perspective, which is closely aligned with the biomedical model of mental health, maintains that the same kinds of psychopathology can be

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found across cultures. Although it can present in different syndromal patterns across cultures, it can be explained by universal principles of human functioning because all humans are believed to share core personality traits and biology. For example, in a review of studies conducted in different countries, Bauermeister, Canino, Polanczyk, and Rohde (2010) reported that the results supported the cross-cultural validity of attention deficit hyperactivity disorder (ADHD) because the international data showed the disorder to have two underlying factors: inattention and combined hyperactivity and impulsivity. Bauer et al. (2011) examined patients from seven countries who had received a clinical diagnosis of schizophrenia and found different kinds of hallucinations across their samples. They posited that these differences could reflect cultural differences in perceptual and attentional processing, in addition to clinical factors such as age of the patient, age of onset, and the duration of the disorder.

Agüera et al. (2017) reported finding different psychopathological expressions in patients with anorexia nervosa from three countries. Patients from Spain and the United Kingdom presented with higher scores on body dissatisfaction, somatization, and overall psychopathology, while patients from China had lower scores on emotional difficulties (depression and anxiety). Bakker, van Dijk, Pramono, Sutarni, and Tijssen (2013) carried out an electromyographic study of 12 patients who exhibited symptoms consistent with *latah*. This syndrome is seen among the Malays in Indonesia and Malaysia, but not observed among other racial groups living in these countries (Geertz, 1968). Its characteristics are excessive startle responses that do not habituate over time and involuntary obedience to commands, echolalia, and echopraxia. The researchers concluded from their findings that the syndrome could be understood as a neuropsychiatric startle syndrome. In the preceding examples, the premise of these studies is that a particular diagnostic entity that is under investigation is real and presents either universally or as a variant across different societies.

When differences in prevalence rates of mental illness are found across societies, universalists maintain that the disparity might be explained by a number of factors. One of them relates to cultural differences in the threshold at which certain behaviors are perceived to be deviant or abnormal. For example, Mann et al. (1992) reported that Chinese and Indonesian clinicians gave higher ratings for hyperactive behaviors than Japanese and U.S. clinicians, even though all these clinicians were viewing the same videotape vignettes of four boys in individual and group activities. The researchers postulated that the results could be explained by different cultural expectations for what constitutes proper child-hood behaviors. Another factor that has been cited to account for the variation in prevalence rates of psychopathology across countries is differences in recognition of disorders by both professionals and lay persons, which has a subsequent effect on referrals and contact with the mental health system. Other factors include the decision of afflicted individuals to seek help from traditional

healers instead of Western medicine; somatic presentation of psychiatric distress which might lead to the problem being treated as a physical (not mental) disorder (Tsai, 2000); the diagnostic criteria used in the studies; degree of impairment of the samples; and source of the clinical information, such as the patient or reports from third parties (Polanczyk, de Lima, Horta, Biederman, & Rohde, 2007).

#### Relativism

Those who adopt the relativism (*emic*) approach emphasize an understanding of native perspectives, knowledge, and skills. They also consider the role played by culture in human experience and explanation of psychopathology (Mena & Joseph, 2017). Some behaviors that would be deemed as unequivocally abnormal in Western psychiatry might be considered otherwise in other societies. Where Western clinicians might define hallucinations as false perceptions and a break from reality, some cultural groups might consider hallucinations as spiritual guidance or divine messages that hold some cultural meaning (Larøi et al., 2014). Christians are more likely to hallucinate about religious figures such as Jesus, Mother Mary, or the devil; rural Africans are more likely to hallucinate about ancestor worship. Data collected from 488 societies showed that ordinary ritual practices in 62% of these cultures involve hallucinations (Bourguignon, 1970), indicating the typicality of hallucination experiences in these societies.

Another interesting example is the annual Hindu religious festival of Thaipusam where devotees fall into a trance while their faces and bodies are pierced with hooks, needles, and skewers (Ward, 1984). This religious ritual is a means for the devotees to give penance, to honor a vow made to the Hindu god of war to overcome bad karma, or to gain spiritual enlightenment (Mellor et al., 2012). The author has personally witnessed Thaipusam in Malaysia several times and noticed no bleeding on the devotees during the piercing; after the ritual ceremony is over, the piercings are removed leaving few or no marks. The trance that the devotees fall into could well be considered a psychotic break from reality. However, it cannot be considered as a form of psychopathology because it was voluntarily induced for religious reasons and accepted by the Hindus as normal during the festival.

Cultures also vary in their attributions for mental disorders. Supernatural or spiritual causes are commonly believed among Haitians (Desrosiers & St. Fleurose, 2002), Thais (Burnard, Naiyapatana, & Lloyd, 2006), and Malays (Haque, 2008). The etiological agents may include spiritual possessions, black magic or curses, or punishment for neglecting the gods or religious values. Other cultures believe that improper flow of the vital life forces leads to illness. The life force is variously

referred to as the *kwan* in Thailand, the *qi* in China, the *ki* in Korea, and the *prana* in India (Tyson & Flaskerud, 2009).

Some cultures might express their distress through physical symptoms instead of psychological complaints. The physical manifestations of psychopathology can be broadly clustered into pain symptoms (e.g., headaches), gastro-intestinal symptoms (e.g., diarrhea), pseudo-neurological symptoms (e.g., muscle weakness), reproductive organ symptoms (e.g., burning sensations in sexual organs), and other physical syndromes (e.g., temporo-mandibular joint syndrome). These physical manifestations are expressed to varying degrees in the different societies (So, 2008). A few examples are *hwa-byung* in Korea, which is characterized by headaches, indigestion, cardiovascular symptoms, anxiety, and anger (Lee, Wachholtz, & Choi, 2014); *shenjing shuairuo* in China that presents as symptoms of aches and pains, memory loss, cognitive difficulties, sleep problems, and fatigue (Chang et al., 2005); and *brain fag* in Nigeria, identified by complaints of memory and concentration problems, unpleasant sensations in the head, and visual impairments (Uchendu, Chikezie, & Morakinyo, 2014). These syndromes are viewed as disorders that are specific to certain cultures and not commonly seen in the West.

More direct evidence for the influence of culture on symptom expression comes from a study by Rao, Young, and Raguram (2007). These researchers showed that South Indian psychiatric patients who had less familiarity with Western cultures tended to endorse more somatic symptoms, whereas those who were more Westernized tended to indicate a greater balance of both psychological and somatic symptoms. Another study examined the prevalence rates of psychiatric disorders among Vietnamese individuals living in the Mekong Delta region of Vietnam and Vietnamese living in Australia (Steel et al., 2009). When the Composite International Diagnostic Interview (CIDI) was used with these individuals, the prevalence rates for positive diagnosis was 1.8% among the Mekong Delta Vietnamese, and 6.1% for the Australian Vietnamese. However, when the researchers included another measure, the Phan Vietnamese Psychiatric Scale (PVPS), which captures cultural idioms (expressions) of distress in the Vietnamese society, the prevalence rates increased to 8.8% for the Mekong Delta Vietnamese and 11.7% for the Australian Vietnamese. Steel et al. attributed the increase to the PVPS somatization scale, providing support for the position that some cultures express their psychological distress through physical symptoms.

Mental health clinicians who adopt a universalistic approach adhere to evidence-based treatments, but examine ways of making the appropriate cultural adaptions to their interventions when working with non-Western clients. As well, the clinicians need to be culturally sensitive and competent in their practice. There has been much discussion and writing about cultural adaptations of mental health treatments and training of clinicians to ensure cultural competency (e.g., American Psychological Association, 2017; Cardemil, 2015; Huey, Tilley, Jones, & Smith, 2014; Kalibatseva & Leong, 2014).

## Culture, Psychopathology, and the DSM

Universalists argue that cultural influences on symptom expression support their notion of an underlying disorder that is exhibited in its variant forms across culture. However, relativists interpret the same information to mean that the cultural variation in symptom presentation could reflect the existence of syndromes that are culture-specific or culture-bound. Culture-bound syndromes are a combination of somatic and psychological symptoms that are exhibited and recognized as an illness only within a specific culture or specific region of the world. A few examples of the culture-bound syndromes that appeared in the *DSM-IV-TR* (American Psychiatric Association, 2000) are *dhat* in India, an anxiety reaction to fear of semen loss from excessive masturbation (Grover et al., 2016); *amok*, or sudden and unexplained short-lived outbursts of violence in Malaysia (Haque, 2008); and *koro* in South Asia and China, which is characterized by intense anxiety that the genitalia or nipples will retract into the body (Crozier, 2011).

The concept of culture-specific or culture-bound syndromes has produced considerable controversy. Critics have complained that accepting the notion of culture-bound syndromes meant that other clinical conditions were universal and immune to the effects of culture, that the culture-bound syndromes excluded clinical conditions (such as anorexia nervosa) that were found primarily in the United States and Europe, and that there were insufficient data to conclude whether the syndromes were distinct clinical entities or culturally-influenced variants of formally recognized psychiatric disorders (Cardemil & Keefe, 2017).

The incorporation of cultural factors in psychopathology was strengthened in the DSM-V (American Psychiatric Association, 2013) through the inclusion of three cultural concepts of distress which convey information on how different cultures experience, understand, and express psychological distress or symptoms. Cultural syndromes describe constellations of symptoms that appear in specific cultural groups and are similar to DSM-IV-TR culture-bound syndromes. Cultural idioms of distress refer to the ways that a cultural group communicates or talks about psychological distress. Some societies might focus more on somatic symptoms and others on psychological or emotional symptoms. Instead of symptoms, some might use more metaphorical descriptions, such as the Punjabi "sinking heart" (Krause, 1989). Finally, cultural explanations of distress relate to causes of distress or symptoms that are recognized by the specific cultures. The DSM-V also provides a cultural formulation interview guide to aid clinicians in their assessment of cultural factors that influence their patients' experience, reporting, and explanation of symptoms. The changes from DSM-IV-TR to DSM-V point to the increasing influence that cultural relativism has on the field of clinical psychology. The DSM-V nevertheless remains a psychiatric manual based on Western views of psychopathology. Even so, it reflects a blend of cultural universality and relativism with the aim of increasing cultural sensitivity among clinicians in their work.

## **Indigenous Psychologies**

Much of the work on cultural-clinical psychology has focused on minority groups (e.g., African Americans, Asian Americans, Latinos) within the mainstream populations of a country or comparing nationalities across countries (e.g., Agüera et al., 2017; Ryder et al., 2008). Little attention has been paid to marginalized indigenous populations within countries. This is not to say that no studies have been carried out with indigenous peoples. On the contrary, there is extensive research on indigenous peoples around the world. However, this body of research tends to be largely ignored by mainstream cultural-clinical psychology.

Indigenous psychologies developed in reaction to Western psychology (Allwood & Berry, 2006). Unlike mainstream psychology, which focuses on intra-individual factors to explain illnesses, indigenous psychologies look to historical, social, political, and cultural factors to explain the health disparity between indigenous and non-indigenous populations where the former have higher rates of morbidity and mortality (Anderson, 2015; Anderson et al., 2006; King, Smith, & Gracey, 2009). There is much research to show that the mental health problems of indigenous peoples are the result of their colonization by Europeans; their forced assimilation led to the loss of their indigenous cultures, disintegration of family and kinship systems, intergenerational trauma, land dispossession, and sociopolitical oppression (e.g., Aho & Liu, 2010; Anderson et al., 2006; Bombay, Matheson, & Anisman, 2011; Czyzewski, 2011; King et al., 2009; Reading & Wien, 2009; Wesley-Esquimaux & Smolewski, 2004). Self-determination and a return to their cultural roots and identity are important to their healing and health (Chandler & Lalonde, 2008; Lavallee & Poole, 2009; McLennan & Khavarpour, 2004).

It is important for indigenous psychologies to be connected to the broader field of cultural-clinical psychology because arguably it is a purer form of cultural relativism. Indigenous ways of knowing are very different from Western ways of knowing. Consider that Western concepts of health and psychopathology typically revolve around the individual and illnesses. There also tends to be a separation between body and mind as shown in psychological theories that invoke biological or psychological underpinnings of clinical disorders. Even when the mind–body connection is acknowledged, the two are still being treated as separate aspects of the human totality. In contrast, indigenous ways of knowing tend to be holistic.

As an example, the First Nations in Canada see health as a balance among four equal and interconnected dimensions of a human: the emotional, the mental, the spiritual, and the physical (McCormick, 1996). Many of the First Nations are also guided by relational ethics that are commonly known as the seven grandfather teachings: wisdom, love, respect, bravery, honesty, humility, and truth (Verbos & Humphries, 2014). In New Zealand, the Māori concept of health and well-being is reflected in the *Te Whare Tapa Whā* model (Vaka, 2016) which is represented by a house (*whare*) that sits on the land (*whenua*) and supported by four poles: the

spiritual dimension (*Te Taha Wairua*), the mental dimension (*Te Taha Hinengaro*), the physical dimension (*Te Taha Tinana*), and the family and social dimension (*Te Taha Whānau*). The four dimensions are interrelated and necessary for good health. The Maori values that are essential to well-being emphasize interconnectedness and behaviors such as sensitivity, respect, and humility that promote interpersonal harmony (Hiha, 2015).

Among the Inuit who live in the circumpolar regions, mental health is associated with pride in Inuit identity and having connection to the land through traditional activities such as hunting for food, sharing, and consuming traditional foods (Gray, Richer, & Harper, 2016; Kirmayer, Fletcher, & Watt, 2008). Inuit also live by traditional values of which there are four natural laws (maligait) that speak to respect for all living things, working for the common good, maintaining harmony, and planning and preparing for the future (McGregor, 2012). These four natural laws are augmented by eight communal principles (Inuit Qaujimajatuqangit or IQ): respecting and caring for others (inuuqatigiitsiarniq), fostering good spirits by being open, welcoming and inclusive (tunnganarniq), serving and providing for family and/or community (pijitsirniq), decision making through discussion and consensus (aajiiqatigiinniq), development of skills through observation, mentoring, practice, and effort (pilimmaksarniq/pijariuqsarniq), working together for a common cause (piliriqatigiinniq/ikajuqtigiinniq), being innovative and resourceful (qanuqtuurniq), and respect and care for the land, animals, and the environment (avatittinnik kamatsiarniq). IQ has been officially adopted by the Government of Nunavut as societal values that guide its work (see www.gov.nu.ca/ information/inuit-societal-values).

As can be seen, indigenous societies focus largely on health and well-being, not illnesses as Western science tends to do. They place importance on cultural beliefs and values, such as achieving balance among all aspects of a person and maintaining strong connections between the individual and everything else that exists beyond, for example, family members, the community, deceased ancestors, the animals, the land, and the environment (Blackstock, 2008; Government of Canada, 2006). Research shows that culture revitalization (Barker, Goodman, & DeBeck, 2017) and enculturation which will allow the indigenous peoples to regain connection with their native cultures (Fleming & Ledogar, 2008) are important to mental health interventions with them.

The other critical element of indigenous mental health efforts is addressing the gross inequality in basic living standards and socioeconomic opportunities that they experience. For example, the social factors relating to the poor health status of Canadian Inuit are lack of resources to promote positive and healthy early childhood development, loss of culture and language, inadequate access to employment opportunities, high cost of living and few opportunities for income generation, inadequate housing, interpersonal violence and substance use, poor access to education, food insecurity, low access to health services, mental health issues, and environmental contaminants and climate change (Inuit Tapiriit Kanatami, 2014). It would seem that ensuring that the basic

survival needs of the individual are met before attending to their mental health needs not only seems prudent but also logical.

#### Possible Reasons for the Disconnection

As previously mentioned, there is abundant research within the mainstream field of cultural-clinical psychology and indigenous psychologies. Yet, it is puzzling that there seems to be little connection between the two areas, given that they have a common objective to investigate the link between cultures and mental health. There are a few possible reasons for this segregation. Indigenous psychologies developed in reaction to mainstream psychology; the latter was seen as emphasizing defects within the individual without considering the social, cultural, political, and historical forces that affect indigenous peoples. Thus, mainstream psychology was deemed inadequate to address local problems (Allwood & Berry, 2006). Mainstream psychology seeks to generalize principles that were developed in Western cultures to other cultures across the world. Indigenous psychologies seek to understand psychology within local contexts because some factors influencing human behaviors are different in different cultural groups. This results in making indigenous psychologies more relevant and responsive to local problems.

Another factor that contributes to the segregation between mainstream psychology and indigenous psychologies has to do with the way research is conducted. Mainstream psychology often relies on empirical and quantitative research methods, whereas indigenous psychologies tend to use qualitative research strategies such as focus groups (e.g., Korhonen, 2006), interviews (e.g., Kral, Idlout, Minore, Dyck, & Kirmayer, 2011), and more recently, Photovoice (e.g., Mark & Boulton, 2017). The conversational style in qualitative research is more aligned with the indigenous acquisition and transmission of knowledge through oral means (Blackstock, 2008). It also allows for personal voices of individual participants to be heard and their subjective experiences to be understood.

Another important factor is that indigenous research tends to be participatory in nature. It involves the participants at all stages of the research, from identifying research questions that have potential to benefit participants and their community, to interpreting the findings to ensure their cultural validity. In essence, it is research that is done *with* and *by* the participants, instead of *on* them, and the power that is normally accorded to the researcher is shared with the participants (Cornwall & Jewkes, 1995). Participatory research is more appropriate for use in indigenous psychologies because of the skepticism and mistrust that many indigenous peoples have toward Western researchers after years of being the subject of investigation and experiencing some culturally insensitive and inappropriate research practices (Cochran et al., 2008). Several indigenous groups are wary of accepting findings arising from Western-style research because of their history with colonialism

where Western knowledge and values were imposed on them at great cost to their own native cultures (Allwood & Berry, 2006; Nelson, 2012).

Mainstream and indigenous psychologies use different journals and outlets for publishing their findings and appeal to different audiences. Mainstream psychological studies are usually carried out by Western-trained researchers and practitioners, their empirical findings are published in peer-reviewed journals, and their works are typically consumed by Western-trained researchers and practitioners. Indigenous psychological research is often conducted by qualitative researchers and indigenous community partners under the aegis of indigenous organizations or networks to address research questions that can help to address local problems or issues of interest to their cultural groups. Their findings are published in journals that have specific interest in indigenous psychology, and that are open to qualitative inquiries. Often, indigenous research is also available as research reports that can be openly downloaded from the websites of the organizations or networks involved in the research project. Research reports such as these are considered to be gray literature and not normally accessed by mainstream researchers who prefer peer-reviewed journals.

#### Synergy Between Mainstream and Aboriginal Psychologies

The weak communication and connection between mainstream cultural-clinical psychology and indigenous psychologies are unfortunate. Enriquez (1992) noted that indigenous psychologies can help to identify overall patterns when research from different cultures is compared. This could be used to inform mainstream psychology about what might be universal in human functioning and inform universal treatment guidelines. Conversely, should investigations find that culture-specific agents cause certain kinds of culture-bound psychological suffering, then interventions would have to be culture-specific to be effective. Collaborative efforts could provide greater and more nuanced understanding of the complex relations between culture and biology/psychology in the development, expression, maintenance, treatment, and prevention of different kinds of psychopathology, as well as the promotion of well-being.

There are instances where research from both mainstream and indigenous psychologies can work very well together to address important social issues for indigenous populations. A good example is the recent National Inuit Suicide Prevention Strategy developed by the Inuit Tapiriit Kanatami (Eggertson, 2016; Inuit Tapiriit Kanatami, 2016). The Strategy identifies six priority areas for intervention, namely, creating social equity, creating cultural continuity, healthy childhood development from birth, increasing access to mental wellness services, addressing unresolved trauma and grief, and using Inuit knowledge to increase Inuit resilience and prevent suicides. Each priority area has its own objectives and action plans mapped out, and all the initiatives are Inuit-specific and led by Inuit. Both Inuit and Western

knowledge were harnessed to inform the comprehensive action plans which involve all sectors (e.g., political, educational, social services, medical, mental health, media, law enforcement, crisis responders, researchers, and Inuit individuals with traditional knowledge, among others) of the Inuit community. Some of the initiatives proposed in the action plans include training in Applied Suicide Intervention Skills Training and Mental Health First Aid (derived from Western knowledge); connecting youth with Inuit history, language, and culture (derived from Indigenous knowledge); and research on Inuit-specific best practices for Inuit suicide prevention (informed by both Western and Indigenous knowledge).

## **Looking Forward**

Culture is not static and is ever-evolving. Ease of transportation and advances in communication technology have resulted in greater contact between cultures and greater exchange of world views, values, and ideas. The face of psychopathology will very likely change with the blending of cultures. For instance, eating disorders have long been considered a primarily Western disorder because of their prevalence in the West (Hopton, 2011). However, the rate has been increasing in Asia and is believed to be related to greater exposure of these countries to Western cultures and the ideals of thinness (Lee, 2000; Lai, 2000; Tsai, 2000). Indigenous youth who leave their family and rural community to attend post-secondary educational institutions will come in greater contact with the mainstream society and might encounter cultural adjustment problems. Refugees who flee their war-torn countries will arrive in foreign countries where the local people might or might not be friendly to them. In addition to the trauma of having to leave their friends, families, and cultures behind, refugees face the enormous challenge of resettling in a new country, often with no home, employment, or social network, beyond the initial assistance that is provided to them by their government or private sponsors.

Cultural-clinical psychologists are in a unique position to investigate the psychological consequences of the increasing contact between cultures in different contexts. There is an abundance of research on the psychological repercussions of individuals moving to a new society or culture either by choice or otherwise. However, the globalization that is occurring across the world also provides opportunities for researchers to examine the psychological health impact on local populations who are witnessing increasing numbers of people from other countries coming into their home country and changing the profile of their demographics. How do they react to the rapid cultural change occurring in their home country? What kinds of stress reactions will we see and in what forms will such reactions be expressed? The potential for cultural-clinical psychologists to make significant contributions to understanding and addressing some of the world's contemporary issues both within and outside of clinical settings is significant.

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# Culture and Psychotherapy Searching for an Empirically-Supported Relationship

# Junko Tanaka-Matsumi

All interviewing and counseling is multicultural. Each client comes to the session embodying multiple voices from the past.

(Paul B. Pedersen, in Lonner & Draguns, 2018, p. 97)

The aim of this chapter is to examine ways to incorporate culture into empirically-supported psychotherapies. Keith (Chapter 1, in this volume) reviewed various definitions of culture and stated that "increased understanding of culture—our own as well as others'—is perhaps the most pressing need for psychological science." Culture is defined as "a unique meaning and information system, shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, pursue happiness and well-being, and derive meaning from life" (Matsumoto & Juang, 2008, p. 12). Keith articulated that understanding will come only "on the strength of sound methodology and accurate data." The same applies to understanding of psychotherapies across cultures. The primary aim of this chapter is to investigate cross-cultural applicability of empirically-supported psychotherapies.

Psychotherapy outcome research has made great strides since the publication of Eysenck's (1952) critical report on the lack of clear evidence that any form of psychotherapy was particularly effective. Today, Paul's (1967) widely cited universal question on the need for identifying specific effects of psychological treatments has been answered to some degree: "What treatment, by whom, is most effective for this individual with that specific problem, and which set of circumstances?" (p. 111). We have increasing knowledge of what works for whom for certain problems such as anxiety, depression, and childhood problems (Chambless & Ollendick, 2001; Fonagy et al., 2014; Roth & Fonagy, 2004). What we do not know is in what

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specific ways culture matters in empirically-supported psychological interventions (La Roche & Christopher, 2008; Miranda et al., 2005) and what we can do to accommodate cultural factors within them (Hwang, 2006). Reflecting the pressing need of the diverse world, studies on the cultural adaptation of empirically-supported psychological interventions are clearly increasing in number (Bernal, Jiménez-Chafey, & Rodríguez, 2009; Griner & Smith, 2006; Hall, Ibaraki, Huang, Marti, & Stice, 2016). Diversity issues in assessment and therapy occupy an important and legitimate place in the training and practice of professional psychology (Sue & Sue, 2015).

My colleagues and I have been interested in two major questions. First, how does a cognitive behavior therapist conduct an assessment interview with a client from a culture or subculture different from his or her own? Second, and much more specifically, how can a cognitive behavior therapist use functional assessment (Tanaka-Matsumi, 2008) to develop culturally sensitive case formulation and interventions that are culturally acceptable? We developed the Culturally-Informed Functional Assessment Interview (Tanaka-Matsumi, Seiden, & Lam, 1996) to generate culture-relevant data from the client. We studied the relation between culture and psychopathology (Draguns & Tanaka-Matsumi, 2003; Tanaka-Matsumi, in press) and ways to advance culturally-informed psychological assessment (e.g., Haynes, Kaholokula, & Tanaka-Matsumi, 2018) in order to practice culturally-informed cognitive behavior therapy (Tanaka-Matsumi, Higginbotham, & Chang, 2002), and develop a culture-infused course in clinical psychology (Tanaka-Matsumi, 2018). Participant observation and professional experiences in diverse cultural settings helped develop ideas for the current chapter.

# **Psychotherapy: Universal Functions and Culture-Specific Contents**

Prince (1980) defined psychotherapy very broadly as "the mobilization of endogenous mechanisms" (p. 292) aimed at relieving an individual's suffering, and called attention to the wide variations in psychotherapeutic procedures. These included sleep, rest, social isolation, dreams, meditation, dissociation states, shamanism, and Western psychotherapies. Frank and Frank (1991) described universal features of broadly defined psychotherapies. These include: (a) help seeker's state of demoralization, (b) availability of a socially recognized healer, (c) sharing of a worldview by healer and client, (d) endorsement of cultural belief systems; and (d) sharing of cultural explanations of suffering. Different cultures practice healing systems in diverse forms that reflect indigenous views of health and illness and ways to help the individual in distress (e.g., Gielen, Fish, & Draguns, 2004; Moodley & West, 2005). Prince (1980) warned about the danger of focusing categorically on any one particular therapeutic mode and applying it to other cultures.

In other words, therapists may not be aware of their own cultural bias when working with culturally different clients (Ridley, 2005).

Psychotherapy "alleviates distress, facilitates adaptive coping, and promotes more effective problem solving and decision making" (Draguns, 2008, p. 21) and takes place within the interactive cultural context of the therapist and the client (Draguns, 1975). These points are particularly true of psychotherapies developed in the West. As Hall (2001) defined them, culturally sensitive treatments involve "the tailoring of psychotherapy to specific cultural contexts" (p. 252). Over the years, with increased multicultural awareness of practitioners and societal claims for accountability, Western textbooks on multicultural counseling and therapy have come to clarify the types of cultural biases in psychotherapy, giving guidelines for addressing cultural complexities in the practice of psychotherapy (e.g., Hays, 2016; Pedersen, Lonner, Draguns, Trimble, & Scharron-del Río, 2016; Sue & Sue, 2015) and for understanding the importance of quality of life across diverse cultures (Keith, 2000; Kim-Prieto & Kukoff, 2018).

Techniques of psychotherapy are important for behavior change as well as the context of their applications. Some techniques are frequently used in different cultural contexts to achieve therapeutic aims. For example, clients of Japanese Naikan therapy (Tanaka-Matsumi, 2004) and clients of Western-derived cognitive behavior therapy may both learn to use the same technique of self-observation and self-monitoring as a first step in directing attention to one's relationships with specific others. However, the therapy rationale and the cultural context of each therapy are very different. Japanese Naikan therapy clients would engage in selfobservation to recall benevolences received from their mothers in terms of specific things their mothers did for them to mobilize a forgotten sense of gratitude. European American clients of cognitive behavior therapy may engage in selfobservation of their interpersonal behavior to increase a sense of independence and autonomy. With regard to interpersonal relationships, assertiveness training was originally developed in the United States with its emphasis on advocating one's own rights. In Japan, assertiveness training is more functional when it accommodates a positive cultural contingency of using indirect verbal expressions of one's needs rather than using direct verbal expressions (Mitamura & Tanaka-Matsumi, 2010).

To give another example, Latino adults in the United States chose to engage in allocentric (other-oriented) relaxation imagery exercise more frequently than idiocentric (self-oriented) imagery exercise in culturally competent relaxation training (La Roche, D'Angelo, Gualdron, & Leavell, 2006). Anybody can learn to relax with training. In this case, however, the selected content of the imagery exercise matched with the allocentric cultural self-orientation of the Latinos. These examples suggest that psychotherapy effectiveness depends on the cultural context of its application.

Psychotherapy researchers have been actively investigating the empirically verifiable bases of psychotherapies delivered to clients with a variety of presenting

problems (Castonguay & Beutler, 2006). In the United States, evidence-based practice in psychology (EBPP) has been officially promoted by an American Psychological Association task force: "Evidence-based practice in psychology (EBPP) is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences." (APA Presidential Task Force on Evidence-Based Practice, 2006, p. 273).

As of 2001, there were over 130 different manualized treatments listed as empirically supported (Chambless & Ollendick, 2001), with more added each year (Nathan & Gorman, 2015). The universal functions of these empirically-supported interventions are tested increasingly and, at times, critically, in the age of globalization (La Roche & Christopher, 2008).

# Globalization, Diversity, and Dissemination of Evidence-Based Practices

The development of global transportation and communication systems has increased people's mobility and altered ethnic and cultural compositions of many countries of the world. In 2017, the number of international migrants worldwide reached 258 million, up from 220 million in 2010 (United Nations, 2017). The U.S. population is expected to reach over 380 million in 2050 and the current minority population will constitute the majority group, replacing the non-Hispanic white majority group (U.S. Census Bureau, 2002). Even within the same country, people hold different values and act according to sociocultural value systems which have been institutionalized over the years, influencing helpseeking behaviors according to ethnic groups (Snowden & Yamada, 2005). There is therefore an increased need for training of culturally competent counselors and therapists to provide culturally-informed and empirically-supported counseling and therapy both within and outside their home countries (Marsella, 2009; Pedersen, 2002; Sue, Zane, Hall, & Berger, 2009). Trainings have accordingly included culture across the curriculum (see Keith, 2018; Rich, Gielen, & Takooshin, 2017).

Globalization and diversification facilitate dissemination of information to those who benefit from the knowledge. As an example of the cross-cultural spread of empirically-supported psychotherapy, we may trace the development of the World Congress of Behavioural and Cognitive Therapy (WCBCT). Six member units of the World Congress Committee (WCC) around the globe participate in this international congress and promote evidence-based psychological treatments. The groups include Association for Behavioral and Cognitive Therapies (ABCT) of North America, the European Association for Cognitive and Behavioural Therapies (EABCT), Asian Cognitive Behavioral Therapy Association (ACBTA) and other such umbrella associations located in all continents of the world. The

practice of cognitive-behavioral therapies has been extended to Asia well beyond the cultural boundaries of their developmental origins in North America and Europe (Andrews & Oei, 2016).

With its emphasis on empiricism, cognitive behavior therapy is used on a national scale in the U.K. The Improving Access to Psychological Therapies (IAPT) program in the U.K. began in 2006 to support Primary Care Trusts in implementing National Institute for Health and Clinical Excellence (NICE) guidelines for particularly underserved adults of working age suffering from depression and anxiety disorders (Layard & Clark, 2014). IAPT is by far the largest program ever implemented by any country to disseminate empirically supported treatments to improve mental health status of those in need by trained psychological therapists. Thus far, outcomes have demonstrated a recovery rate of around 50% of patients treated for depression and anxiety and two-thirds showed "reliable improvement" (Clark, 2018). Cultural and contextual issues regarding the IAPT are yet to be reported specifically to fully account for the effects of nation-wide administration of the program.

## Practitioners' Knowledge of Empirically-Supported Therapies

It is frequently reported that there is a wide gap between clinical research and practice. The question concerns the utility of research-based treatments in day-to-day clinical work with individual clients from diverse cultural backgrounds. Stumpf, Higa-McMillan, and Chorpita (2009) developed a 40-item test called the Knowledge of Evidence-Based Services Questionnaire (KEBSQ) in the treatment of child and adolescent mental health problem areas: anxious/avoidant, depressed/withdrawn, disruptive behavior, and/or attention/hyperactivity. A total of 184 community behavioral health practitioners from the state of Hawaii in the U.S. participated in the study. The group consisted of ethnically diverse practitioners with almost equal proportions of White (34.4%) and Asian (32.5%) practitioners, reflecting the two largest subgroups in Hawaii. The KEBSQ includes 30 practice elements that are actually used in empirically supported treatment protocols for child/adolescent problems (e.g., exposure, relaxation, time out, feedback) and 10 items that are not directly relevant (e.g., play therapy).

The KEBSQ proved sensitive to changes in knowledge of empirically supported psychological intervention protocols after the training in evidence-based treatments for youth. This study demonstrated the importance of ascertaining a solid knowledge base when disseminating evidence-based treatments to community practitioners in order to evaluate the clinical effectiveness of efficacious treatments for children and adolescents (Huey & Polo, 2008).

## **Cultural Competencies in Psychotherapy**

What are the competencies necessary to perform empirically-supported and culturally responsive therapies? Cultural competencies should be generic to all forms of counseling and therapy and encompass awareness, knowledge, and interpersonal skills contributing to the practice of psychotherapy and counseling (Hays, 2016; Heppner, 2006; Pedersen, 2002; Sue et al., 2009). Organizationally, the APA Presidential Task Force (2006) identified eight "components of clinical practice that promote positive therapeutic outcomes" (p. 276) each of which is highly relevant to the practice of culturally-responsive assessment and therapy. The eight clinical components cover the whole range of clinical activities: (a) assessment, diagnostic judgment, systematic case formulation, and treatment planning; (b) clinical decision making, treatment, and monitoring of progress; (c) interpersonal expertise, (d) self-reflection and skills acquisition: (e) empirical evaluation and research; (f) understanding the influence of individual and cultural differences on treatment; (g) seeking available resources; and (h) having a cogent rationale for clinical strategies. The eight clinical competencies are linked by empiricism, attention to individual differences, and multicultural perspectives. These three features involve professional skills that define cultural competence. When Cabral and Smith (2011) conducted a meta-analytic review of 52 studies of preferences for racial/ethnic matching of clients and therapists in mental health services, the results indicated lack of benefit of clients' preference for racial-ethnic matching to actual treatment outcomes. The meta-analytic results demonstrate the importance of identifying therapeutic variables contributing to client outcome in order to deliver culturally competent service to diverse clients.

If cultural competencies are important, are professional psychologists practicing cultural competence? In a national survey, Hansen et al. (2006) developed a 52-item Multi-cultural Practices and Beliefs Questionnaire and investigated the extent to which professional psychotherapists (N = 149, 93% European American) in the United States believe and actually engage in culturally competent practice. The authors found an overall significant difference between mean ratings for practices and beliefs. Among the universally endorsed cultural competence items are: (a) show respect for client's worldview; (b) avoid idealizing racial/ethnic groups; (c) take responsibility for transcending one's own negative racial/ethnic cultural conditioning; and (d) evaluate one's assumptions, values, and biases. Hansen et al. reported that only 22% of the practitioners used the Cultural Case Formulation in DSM-IV-TR (American Psychiatric Association, 2000) with ethnic clients, and only about 33% have used culturally sensitive data-gathering techniques in their practice. In DSM-V (American Psychiatric Association, 2013) the Cultural Case Formulation Interview (CFI) was improved by including specific procedures, guidelines, and illustrative case examples (Lewis-Fernández, Aggarwal, Hinton, Hinton, & Kirmayer, 2016). The CFI now describes 16 interview questions that

cover four domains of culturally relevant assessment: (a) cultural definitions of the clinical problem (three questions); (b) cultural perceptions of cause, context, and support (seven questions); (c) cultural factors affecting self-coping and past help-seeking (three questions); and (d) cultural factors affecting current help seeking (three questions). Culturally-informed interviews should be an integral part of assessment, case conceptualization, and intervention by professional psychologists.

# **Cultural Adaptation of Empirically-Supported Psychotherapy**

Cultural adaptation is the systematic modification of an evidence-based treatment or intervention protocol to consider language, culture, and context in such a way that it is compatible with the client's cultural patterns, meanings, and values (Hwang, 2016). Cultural adaptation involves incorporation of culture-relevant and culture-sensitive information into the practice of psychotherapy with diverse clients. Adaptations that are well documented, systematic, and tested can advance research and inform practice (Bernal et al., 2009, p. 361).

To identify common factors seen in different cultural adaptation guidelines, van de Vijver and Tanaka-Matsumi (2008) reviewed models of cross-cultural assessment for case formulation. They reported considerable similarities among the models (e.g., Hwang, 2006; Sue, 1998; Tanaka-Matsumi et al., 1996). The common cultural accommodation includes assessment of the following: (a) client's cultural identity and acculturation; (b) conflict with values; (c) client's own idiom (expressions) of distress; (d) client's causal explanatory model of presenting problems; (e) metaphors of health and well-being in the client's cultural group; (f) client's motivation for change; and (g) client's social support network.

Our impending question is whether there is evidence that culturally adapted therapies are actually more effective than those without particular cultural consideration. To what extent are they effective? Griner and Smith (2006) conducted a comprehensive literature search on culturally adapted mental health treatments and then performed a series of meta-analyses to determine effectiveness. They found 76 studies, with a total of 25,225 participants. Typically, studies included the comparison of a culturally adapted psychological intervention to a "traditional" intervention. Across all 76 studies, the average effect size was d = .45, indicating a moderately strong effect. The results were especially promising when the intervention was targeted for a specific cultural group (e.g., Hispanics) rather than a mixed group. The authors reported that as high as 84% of the total studies explicitly included cultural values and contents into culturally adapted treatment such as the use of folk heroes for children. Griner and Smith's criteria of cultural adaptation included: (a) reference to cultural values and stories; (b) racial/ethnic matching of client and therapist; (c) service in client's native language; (d) multicultural paradigm of agency; (e) consultation with a culturally familiar

individual; (f) outreach efforts; (g) extra service to retain clients; (h) verbal administration of materials for illiterate clients; (i) cultural sensitivity training for professional staff; and (j) referral to external agencies for additional services. More recently, Hall et al. (2016) reported the results of a new meta-analysis of 78 studies that included 13,998 participants, 95% of whom were non-European American. Their results strongly support those of Griner and Smith (2006) with more details of comparison conditions and psychopathology measures included.

The meta-analytic results showed the benefit of cultural adaptation of psychotherapy regardless of the technical content of each therapy. These culture-relevant variables are expected to interact with the client's presenting problems and the treatment process.

# Culturally-Responsive Cognitive Behavior Therapy: Asking the Right Questions to Expand the Application

Cognitive behavioral therapists are trained to ask important questions with regard to the functional relation between the expression of distress and cultural values, or the impact of client ethnicity and religiosity on coping with distress. For example, studies of culturally-responsive cognitive behavior therapy are available on such topics as somatic symptoms of post-traumatic stress disorder (PTSD; Hinton, Hofmann, Rivera, Otto, & Pollack, 2011), panic attacks (Friedman, Braunstein, & Halpern, 2006), and depression (Hwang, 2016; Nicolas, Arntz, Hirsch, & Schmiedigen, 2009), among others.

In their textbook, Foundations of Counseling and Psychotherapy: Evidence-based Practices for a Diverse Society, Sue and Sue (2007) included an explicit section called "Cultural Diversity Considerations" in each chapter on different forms of counseling and psychotherapy. The title and the content both suggest that the authors are making active efforts to advance evidence-based practices for diverse societies. The authors pay close attention to the quality of the relationship between the therapist and the client. They summarized the conclusions of the APA Division 29 Task Force (Ackerman et al., 2001) on empirically supported therapeutic relationship. The main conclusions are that the therapeutic relationship makes a contribution to psychotherapy outcome, independent of the specific type of treatment, and adapting the therapy relationship to specific client needs and characteristics enhances the effectiveness of treatment. The therapeutic alliance factors are considered to complement the practice of empirically supported therapies. Demonstrably effective "empirically supported relationship variables" (Ackerman et al., 2001, p. 495) included therapeutic alliance, cohesion in group therapy, empathy, goal consensus and collaboration, customizing therapy to deal with resistance or functional impairment, and management of countertransference. Castonguay and Beutler (2006) embarked on a synthesis of the literature related to empirically supported treatments and relationship factors that are effective for clients with depression, anxiety, personality disorders, and substance abuse problems. Castonguay and Beutler asked: What is known about the nature of the participants, relationships, and procedures within treatment that induce positive effects across theoretical models and methods? And, how do the factors or variables that are related to participants, relationships, and treatments work together to enhance change?

Sue and Sue (2007) included both technique and relationship factors as relevant to enhancing therapeutic effectiveness with diverse clients. Under cognitive behavior therapies for depression, the authors questioned if social and cultural influences are the cause of dysfunctional beliefs, if there are cultural factors and norms that need to be taken into consideration, and if the goals being considered are culturally appropriate for the client and his or her cultural group. Asking these diversity questions strengthens the cultural basis of empirically supported treatments, and practitioners would benefit from training in cultural orientation to the currently available guidelines (Tanaka-Matsumi, 2018).

As part of the case formulation methods, the cognitive behavior therapist gathers appropriate, idiographic data from the client and other informants. A major advantage of the case formulation approach is its process orientation and individualized approach. The therapist's knowledge of the client's cultural definitions of problem behavior and cultural norms regarding behavior, change strategies, and culturally approved change agents will enhance the degree of cultural accommodation. The functional analysis identifies antecedent events and consequences of problem behaviors within the client's social network. Cultural factors are embedded in the client's larger social environment and reinforcement history (Biglan, 1995; Hayes & Toarmino, 1995).

At multiple clinical decision points during assessment, the therapist develops hypotheses for individual clients and probes for the contribution of contextual variables. As part of the case formulation methods, the therapist gathers appropriate, idiographic data from the client and other cultural informants (Bruch & Bond, 1998; Nezu, Nezu, Friedman, & Haynes, 1997). The step-by-step functional approach helps the therapist with clinical judgments in seven domains: (a) the problem list; (b) core beliefs; (c) precipitating and activating situations; (d) the working hypothesis; (e) origins or early history of the problem; (f) the treatment plan; and (g) predicted outcome of treatment (Persons & Tompkins, 2007). A major advantage of the case formulation approach is its process orientation and individualized approach. To gather culture relevant information from the client, it is important to establish a working alliance with the client, so that the therapist and the client can collaborate with each other.

La Roche et al. (2006) evaluated the effectiveness of the culturally sensitive relaxation method with Latino adults in a group setting. They used the Culturally Competent Relaxation Intervention (CCRI) which was designed especially for Latinos who hold allocentric self-orientation. Allocentrism at the individual level is connected with the collectivism cultural dimension. Relaxation for

individualistic/idiocentric individuals directs attention to self rather than interconnectedness with the surroundings. The CCRI used a group-socializing format before teaching guided imagery with either an allocentric imagery exercise of being with someone who makes one happy, or with an idiocentric imagery exercise of being by oneself on a beautiful beach. The authors reported preliminary results concerning Latinos' preference for allocentric imagery. The state of relaxation is a universal state of mind, but the content of relaxation exercise can be culturally variable to benefit the person using it. Future study could employ non-Latinos to examine whether allocentric preference is culture-related or more universal.

A series of studies conducted in Boston with the Asian community gives excellent examples of cultural adaptation of empirically supported cognitive behavior therapy protocols for the treatment of specific anxiety disorders (Hinton et al., 2005; Iwamasa, Hsia, & Hinton, 2006). Cognitive-behavioral treatment has been recognized as evidence-based and several detailed manuals are available (e.g., Barlow & Craske, 1994). One important component of these treatment protocols is the use of repeated exposure to feared situations to reduce the intensity of the fear response. In the case of panic attacks, clients are exposed to feared bodily sensations and taught to modify their maladaptive self-statements during exposure. Hinton and Otto (2006) conducted a cultural analysis of somatic symptoms of a panic attack in traumatized Cambodian refugees who received cognitive-behavior therapy in Boston. The authors introduced the Cambodian cultural syndrome of "weak heart" based on the ethnographic account of Wind as the causal agent of anxiety symptoms that produced somatization of trauma-related distress. They hypothesized that "weak heart" produces catastrophic cognitions and somatic symptoms. According to the authors' cultural assessment, Cambodians construe a panic attack as a Wind attack and consequently engage in self-statements to remove Wind. Functional assessment of these "coining" and "cupping" statements indicated that these statements serve as the safety behaviors that maintain and perpetuate catastrophic cognitions about Wind.

To accommodate cultural context, Otto and Hinton (2006) conducted therapy sessions in a local Buddhist temple with interpreters to help Cambodian refugee clients. They assessed the clinical relevance of culture-specific beliefs about *Wind* traveling through vessels in the body and creating a dangerous bodily condition. They also encouraged the use of cultural metaphors of somatic symptoms and Cambodian cultural concepts whenever possible.

# Beyond Specific Therapies: Therapy as Negotiation in Cross-Cultural Context

Culturally adapted psychotherapy has components of "therapy as negotiation" (Kleinman, 1980). The interactive procedure is helpful for understanding the cultural meaning of the client's presenting problem. First, the therapist encourages

clients to give their own explanation of the presenting problem. Second, the therapist discloses the explanation, or explanatory model, that he or she uses to interpret the problem. Third, the two frameworks are compared for commonalties and discrepancies. Finally, the client and clinician translate each explanatory model into mutually acceptable language, so that they may jointly set the content of therapy, the target behavior, and outcome criteria.

Reflecting Frank and Frank's (1991) definition of psychotherapy, effective communication between the therapist and the client in psychotherapy is based on the shared cultural meanings of the concepts and idioms of distress. To quote Pedersen (2002) on culturally competent counselors, "Skill requires framing the solution in the client's cultural language and context. Skill requires culturally appropriate evaluation of the context so that resulting change will be constructive with positive consequences" (p. 9).

#### Conclusion

A large number of empirically-supported therapies are currently available for the treatment of specific disorders. Cognitive behavior therapy is considered promising in global contexts (Hinton & Jalal, 2014). Similarly, the literature on empirically-supported relationship factors has helped direct our attention to the dynamic nature of interaction between the therapist and the client within the cultural context. There is an increasing number of studies on the adaptation of empirically-supported therapy for specific cultural groups and problems. Meta-analyses of culturally adapted psychological interventions have broadly proven the benefit of cultural adaptation procedures on selected outcome measures of target clinical problems. Two of the more pressing issues for the future include the dissemination of evidence-based psychotherapies to communities of diverse clients, and training of culturally competent professionals to deliver empirically supported psychotherapies. There still is a noteworthy gap between research and practice.

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# Part IX Emotion and Well-Being

The study of basic emotions is one of the most compelling of research areas in cross-cultural psychology, and gave rise to early demonstrations of universality in facial expressions of emotion that are still considered standard in the field. Researchers, dating from the time of Charles Darwin, have long considered emotional expression innate and adaptive in its contribution to survival and well-being. In Part IX, we will examine evidence that provides additional strong support for the innate biological nature of expressions of emotion.

Investigators from different backgrounds and working in different countries have defined well-being in various ways, including wealth and health. They have also employed measures of personal satisfaction, and have explored the role of objective (tangible measures like income) and subjective (personal judgments) influences on well-being. Subjective factors are often more important than objective factors, for example, a rich person (high on the objective measure of wealth) can nevertheless have poor life satisfaction (a subjective judgment). In this section we will also learn about the homeostatic nature of well-being and its adaptive value.

Happiness, while related to well-being, is a different construct, and has received its own share of attention from cross-cultural researchers. Although most people value happiness, it varies across culture, and, as with satisfaction, researchers continue to investigate development of meaningful measures of happiness across cultures.

## Culture, Emotion, and Expression

#### David Matsumoto and Hyi Sung C. Hwang

The study of emotion across cultures has a long history in psychology, and for good reason. Humans experience a wide range of affective phenomena and much of it is called "emotion" by both researchers and lay persons alike. All of us have a lifetime of access to and contemplation about emotions and other affective states, and a complex verbal and nonverbal language and communication system with which to express those emotions and talk about them. Emotions give meaning to life, motivate behaviors, and color our thoughts and ideas.

Research over the past half-century has documented many cultural similarities and differences about emotions. These seemingly disparate findings have led to many debates about emotion and culture over the years, especially concerning the possible universality vs. cultural specificity of emotion, and in particular about facial expressions of emotion (Ekman, 1994; Feldman Barrett, 2006; Izard, 1994, 2007; Russell, 1994). These debates have also involved lingering questions concerning the role of biology and phylogeny vs. cultural learning in all aspects of emotion, including emotional expression.

Recently, we proposed a theoretical model that integrates this seemingly disparate literature by providing a biocultural model of emotion (Matsumoto & Hwang, 2012, in press). This model posits the existence of a biologically-based, core emotion system that is calibrated, regulated, and elaborated by culture and cultural learning. We believe that this model helps to organize and understand the disparate findings in emotion research across cultures to date, and casts the seemingly contradictory literature on culture and emotion into a cohesive, somewhat neatly integrated coherent whole. In a nutshell, our position is that the relative contributions of biology and culture, and thus findings of universality or cultural

specificity, differ depending on the type of emotion examined and the specific domain of emotion assessed.

One of the core premises of the biocultural model is the existence of a biologically-based, core emotion system. Much of the research that informs the existence of such a system is based on the concept of basic or biological emotions (hereafter basic emotions). Much of this research centers on studies examining cultural similarities and differences in the expression and perception of facial expressions of emotion. In the remainder of this chapter, we review this area of research, and highlight the contribution of studies of facial expressions of emotion in blind and sighted individuals to this literature. We believe that these studies provide convincing evidence for the existence of a biologically-based, core emotion system, and the universality of certain facial expressions of emotion.

#### **Basic Emotions**

One of the most powerful concepts that has emerged in the last several decades in psychology is known as *basic emotions*. These emotions—anger, disgust, fear, joy, sadness, surprise—are thought to be biologically wired in humans, and shared with nonhuman primates such as chimpanzees. To be sure, the existence of basic emotions does not argue against the existence of the many other emotions that humans experience, a misconceptualization made early on in this area. Over the years research has indicated that a number of characteristics distinguish basic emotions from other emotions: (a) distinctive universal signals; (b) presence in other primates; (c) distinctive physiology (in both the autonomic nervous system—ANS—and the central nervous system—CNS); (d) distinctive universal antecedent events; (e) coherence among emotional responses; (f) quick onset and brief duration; and (g) automatic and unbidden appraisal processes that trigger emotions (Ekman, 1992).

One of these characteristics—distinctive universal signals—is especially central to the idea of basic emotions. These signals are primarily, but not exclusively, exemplified by the universality of facial expressions of emotion. Darwin (1872) was the first to argue that emotions are biologically innate and evolutionarily adaptive. According to Darwin, emotions are transient bio-psycho-social reactions programmed to help individuals to adapt to and cope with events related to survival and well-being. They are biological and innate because they involve unlearned physiological responses from the nervous systems, and prime skeletal muscle activities. They are psychological because they involve specific mental processes required for elicitation and regulation of response. And because they are reactions to events that have meaning to us, their expression is important so that others in our surroundings immediately know what is going on. Thus, basic emotions involve universal signals that help people survive (see also Hwang & Matsumoto, 2016; Matsumoto & Hwang, 2012, in press).

The universal expression and recognition of emotion have been documented in numerous studies (Elfenbein & Ambady, 2002; Hwang & Matsumoto, 2016; Matsumoto, 2001; Matsumoto, Keltner, Shiota, O'Sullivan, & Frank, 2008). These expressions have very rapid onsets, are made possible by unbidden, automatic appraisal, and result in involuntary changes in expression and physiology in a coherent package. This assertion has been supported by studies of the ANS and CNS, supporting the fact that emotions are the products of evolution, with biological givens (Ekman, 1999). (See Figure 24.1 for examples of the seven facial expressions of emotion that research has documented to be universally expressed and recognized.)

Despite the overwhelming evidence concerning the universality of emotional expression and recognition, there have been controversies surrounding their source. Essentially, there are two potential sources of universal expressions: culture constant learning and biological innateness. Researchers supporting the learning perspective have suggested that the universality of facial expressions of emotion may actually have been due to the ability of some people to learn how to spontaneously and automatically express emotions (Feldman Barrett & Russell, 1999; Fernandez-Dols & Ruiz-Belda, 1997; Russell, 1991). Thus, all people around the world learn to express anger, in a very precise way, at anger-eliciting events because



**Figure 24.1** The seven basic emotions and their universal expressions. Photograph by Author.

they see others doing so and are reinforced for doing it. An evolutionary viewpoint, however, suggests that the universal facial expressions of emotion are biologically hardwired from birth, and present in all humans as a product of natural selection.

Merely documenting the universality of emotional expression in many cultures around the world does not resolve questions concerning the source of the universality; other methodologies are necessary, including studies of the developmental emergence of facial expressions (Oster, 2005), the expressions of nonhuman primates (Parr, Waller, Vick, & Bard, 2007; Vick, Waller, Parr, Pasqualini, & Bard, 2007), and the facial expressions of emotion in people with disabilities. One type of study that has helped resolve this question involves the study of blind individuals, especially those born blind (congenital blindness). If people who are congenitally blind produced the same facial expressions of emotions as those with sight, that would be strong evidence for the biological innateness of facial expressions of emotion because there is no way they could have learned to produce those expressions by watching others. Moreover, if congenitally blind people all around the world from different cultures did so, that would be even stronger evidence for a biologically resident source for emotions and their facial expressions. Thus, the study of the facial expressions of emotions of blind individuals is an interesting and important method by which to address basic questions about the source of emotions and their expressions, and address the contribution of biology and culture.

In this chapter we describe two studies from our laboratory that addressed questions concerning the source of universal facial expressions of emotion by examining congenitally blind individuals in naturalistic settings. These studies provided strong evidence for the biological innateness of the universality of facial expressions of emotion. We begin below with a brief review of previous studies of the expressions of blind individuals.

## Previous Studies Examining the Facial Expressions of Emotion in Blind Individuals

Over the years, a number of studies have examined the expressive behavior of blind persons. Some of these examined voluntarily-produced expressions, and indicated that blind individuals have difficulties posing emotional expressions (Dumas, 1932; Fulcher, 1942; Galati, Scherer, & Ricci-Bitti, 1997; Mistschenka, 1933; Ortega, Iglesias, Fernandez, & Corraliza, 1983; Rinn, 1991; Webb, 1977). But voluntarily produced expressions are not the same as involuntary, spontaneous expressions; they differ in many characteristics (Ekman, Hager, & Friesen, 1981; Hager & Ekman, 1985). Thus, studies of posed expressions cannot inform us as to whether blind individuals produce the same expressions spontaneously.

Studies of blind individuals that have examined spontaneous expressions have all reported that blind individuals spontaneously produced the same types of

emotional expressions as sighted individuals. But some of these studies relied on observation by the experimenter or assistants (Charlesworth, 1970; Eibl-Eibesfeldt, 1973; Freedman, 1964; Goodenough, 1932; Thompson, 1941); thus, it was not clear what expressions actually occurred in these studies because observation is not as precise as careful measurement of the actual expressive behaviors that occurred. Other studies involved measurement of the facial muscle movements (Cole, Jenkins, & Shott, 1989; Galati, Miceli, & Sini, 2001; Galati, Sini, Schmidt, & Tinti, 2003; Ortega et al., 1983; Peleg et al., 2006). But with the exception of Duchenne smiling (smiles involving the muscle around the eye and the muscle that pulls the lip corners up), no study examined the existence of specific facial *configurations* associated with emotions. Studying facial configurations is important because emotional expressions involve various combinations of facial muscle movements in specific configurations, and without examining the configurations, it is difficult, if not impossible, to draw any conclusions about emotional expressions.

## **Evidence Concerning the Source of Universal Facial Expressions of Emotion**

We conducted two studies that examined the spontaneous facial expressions of emotion in a highly emotionally charged event—medal-round competition at the Olympic Games. The first study investigated the expressions of sighted athletes in the judo competition of the 2004 Athens Olympic Games (Matsumoto & Willingham, 2006). This study provided additional evidence for the universal production of facial expressions of emotion, and served as an important comparison base for the second study, which examined the spontaneous facial expressions of emotion of blind athletes competing at the 2004 Athens Paralympic Games just 2 weeks later (Matsumoto & Willingham, 2009). Our interest in this chapter is in the findings of the blind athletes, but we first present what was found for the sighted athletes.

#### Spontaneous Expressions of Sighted Athletes

In the first study (Matsumoto & Willingham, 2006), we examined the expressions of the 84 gold, silver, bronze, and 5th place winners of the judo competition at the 2004 Athens Olympic Games. (Athletes who win the silver lose the gold medal match; athletes who win 5th place lose the bronze medal match; there are two bronze medals awarded in each division in judo competition.) The athletes came from 35 countries and 6 continents and constituted a sample of the most culturally diverse individuals in whom spontaneous expressions that occurred in a highly charged, emotional event in different situations have been examined.

We used high speed photography to capture their facial reactions immediately at the end of completion of their medal match and two times during the medal ceremonies. Their expressions were coded using the Facial Action Coding System (FACS) (Ekman & Friesen, 1978), and FACS codes were then compared to the Emotion FACS (EMFACS) dictionary to obtain emotion predictions (Ekman & Friesen, 1982; Matsumoto, Ekman, & Fridlund, 1991). EMFACS identifies facial muscle movements that are theoretically related to facial expressions of emotion posited by Darwin (1872) and later Tomkins (1962, 1963), and empirically verified by studies of spontaneous expression and judgments of expressions by Ekman and colleagues over 20 years (Ekman, Davidson, & Friesen, 1990; Ekman & Friesen, 1971; Ekman, Friesen, & Ancoli, 1980; Ekman, Friesen, & Ellsworth, 1972; Ekman, Friesen, & O'Sullivan, 1988; Ekman, Sorenson, & Friesen, 1969).

The first set of analyses focused on the athletes' expressions produced immediately at match completion, when they knew either they had won a medal or not, and which medal (i.e., gold, silver, or bronze). There were several theoretically important questions addressed, the first of which was whether or not emotional expressions occurred at all. Until this study, no previous study had documented the existence of the universal facial expressions of emotion in a naturalistic field setting, so this very basic question was one of the primary foci of the study. In fact, of the 84 athletes photographed at match completion, there were no usable photos for six. Of the remaining 78, 67 (86%) provided at least one expression that was FACS codable. Of these, 33 (49%) provided two expressions, 13 (19%) provided three, and 5 (7%) provided four expressions. Of the 118 expressions coded, only four did not produce an emotion prediction by the EMFACS dictionary. There was a considerable range of expressions, including different types of smiles, and expressions of contempt, disgust, fear, and sadness. Thus, the vast majority of the athletes produced expressions at match completion, and these corresponded to emotions predicted by EMFACS.

Another important theoretical question was whether or not the expressions differentiated between winners and losers. The results indicated that this was indeed the case; winners (gold and bronze medalists) were much more likely to smile (Duchenne) than losers, while the latter (silver medalists and fifth placers) were much more likely to display sadness, contempt, disgust, or no expressions.

We then examined whether the distribution of expressions differed according to culture. Because of small sample sizes for individual countries, we combined them into three categories: North America/Western Europe, East Asia, and All Others. No analysis produced a significant cultural difference, providing evidence for the universality of the expressions.

An additional merit to this study was that the medalists also participated in the medal ceremony; thus, we could compare the expressions of the same individuals in two naturalistic settings. Medal ceremonies occurred in the middle of the competition area, and about 30 minutes after the completion of the last match of the day. Athletes marched in single file, stood behind the podium, stepped up onto the

podium when their names were called, and received their medal and wreath from a dignitary. After all the athletes had received their medals, they stood for the playing of the national anthem of the gold medalist, and then gathered on the gold medal podium for a group photo. They then stepped down from the podium and marched around all four sides of the field of play, stopping to greet fans and allow their photos to be taken. Although the medal matches were likely to lead to relatively uninhibited expressions because of the nature of the situation and competition, the medal ceremonies were clearly a social event, produced for the purpose of a viewing audience both in the arena and on television. By focusing on the athletes in the medal matches, we had a chance to measure their spontaneous behavior in two very different situations.

Despite the fact that none of the silver medalists had smiled when they lost their medal match, almost all (54 of 56) of the athletes who participated in the medal ceremonies smiled when they received their medal. This finding spoke to the power of the social situation to change the nature of the expressions produced. When the specific type of smile was examined, however, the specific types of smiles produced differentiated place finish. Gold and bronze medalists (i.e., those who had won their last match to take a medal) were much more likely to display Duchenne smiles, and especially uncontrolled Duchenne smiles, <sup>1</sup> than were the silver medalists (who lost their medal match). The silver medalists did not display felt, enjoyable emotions as much as either the gold or bronze medalists.

We tested for cultural differences in these expressions using the country classification described above. No analysis produced a significant result; thus, there were no cultural differences in smiling behavior when athletes received their medals. Essentially the same results were found when athletes' expressions were examined at the point in the medal ceremonies when they posed on the podium after the playing of the national anthem of the gold medalist.

This study produced strong evidence that the facial expressions of emotion previously reported in laboratory studies to be universal also occur in an emotionally charged, naturalistic situation. That there were no cultural differences in the first expressions at match completion is supportive of the universality of these expressions to occur when emotion is aroused. The expressions clearly differentiated between victors and the defeated. The facial signs of victory were Duchenne smiles; the expressions of the defeated athletes were strikingly different. Of the 42 athletes who lost their medal match, only one smiled; the others showed a variety of negative emotions, including sadness, contempt, disgust, and fear. Moreover, a not insubstantial number of them also displayed no emotion. That they did not simply show less smiling strongly suggested that their emotional experiences were substantially different than the gold and bronze medalists; thus, there was not a linear decrease in smiling from gold, silver, and bronze medalists. Finally, nearly all athletes spontaneously smiled during both periods of the medal ceremonies, probably due to the highly staged and public nature of the ceremonies, demonstrating the powerful influence of social context on expressive behavior

(and to cultural learning about what was socially appropriate in that situation). But the smiles of the silver medalists were different than the smiles of the gold and bronze medalists. Gold and bronze medalists displayed Duchenne smiles, while silver medalists were more likely to display controlled Duchenne smiles, non-Duchenne smiles, or smiles blended with sadness. On the podium, after receiving the medal and the national anthem of the gold medalist was played, some silver medalists did not smile at all, instead displaying contempt, sadness, or uninterpretable expressions.

#### Spontaneous Expressions of Blind Individuals

Our second study (Matsumoto & Willingham, 2009) compared the spontaneous facial expressions of blind judo athletes at the 2004 Athens Paralympic Games with the sighted athletes reported above. The athletes in this study came from 23 countries/cultures. If congenitally blind individuals from vastly different countries and cultures produced exactly the same facial configurations of emotion in the same emotionally evocative situation, this would be strong evidence for the biological basis of their source because these individuals could not have possibly learned to produce these expressions through visual observation. Some may argue that these individuals may have learned to produce those expressions tactilely, but that argument would require that infants are able to feel different expressions that occur spontaneously—that is, rapidly, automatically, and unconsciously—on themselves or others, and be able to spontaneously produce them in a precise fashion, and that this learning process occurs across all cultures studied. This proposition is hardly defensible.

This study was conducted in exactly the same manner as the study of sighted athletes reported above. We identified expressions that occurred immediately at the end of the medal matches, and during the medal ceremonies. The expressions were coded by FACS, and then classified into emotion categories using the EMFACS dictionary. We compared the expressions of the blind and sighted athletes on both the levels of individual facial muscle movements and emotion categories. We also examined the difference between congenitally and non-congenitally blind athletes, and found no significant differences between them; thus, we refer to them as one group below.

We found near-perfect concordance between the expressions of the blind and sighted athletes. For example, correlations between the frequencies of the blind and sighted athletes' individual facial muscle behaviors were r(32) = .94, p < .01; r(32) = .98, p < .01; and r(32) = .96, p < .01, for match completion, receiving the medal, and on the podium, respectively. These data are especially impressive given the fact that FACS coding identifies over 40 individual movements that can occur at any one time, allowing for thousands of combinations of expressions. Despite this potential for great variety, the expressions were amazingly similar between the blind and sighted athletes.

Moreover, the expressions of the blind athletes functioned in exactly the same ways as the sighted athletes. For example, winners displayed all types of smiles, especially Duchenne smiles, more frequently than the defeated athletes, who displayed more disgust, sadness, and combined negative emotions. When receiving their medal, winners of their final matches (gold and bronze medalists) displayed all types of smiles and Duchenne smiles more frequently than did the athletes who lost their final match (silver medalists), who displayed more non-Duchenne smiles. Thus, not only were the expressions comparable; similar types of expressions occurred at similar times and in reaction to similar events. These findings indicated that emotions and their expressions functioned the same way for the blind individuals. (See Figures 24.2–24.5 for examples and comparisons.)<sup>2</sup>

These findings provided strong support for the notion that blind individuals produce exactly the same facial expressions of emotion as sighted individuals when emotions are spontaneously aroused. As mentioned above, there is no reasonable explanation for why congenitally blind and sighted individuals around the world, from different cultures and backgrounds, should produce almost exactly the same facial configurations corresponding to the same emotionally evocative events, other than a biologically resident source from birth. Thus, we believe that there is a biologically-based, emotion-expression linkage that is universal to all people of all cultures, which is indicative of the core emotion system.



Figure 24.2 Comparison of blind and sighted athletes who just lost a match for a medal.



Figure 24.3 Comparison of blind and sighted athletes who just won a match.



**Figure 24.4** Comparison of blind and sighted athletes who just won a match and were overcome with emotion.

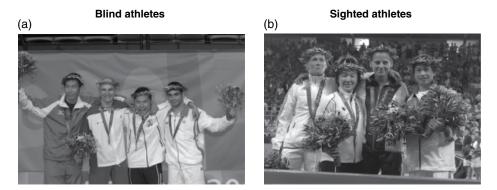


Figure 24.5 Comparison of blind and sighted athletes on the podium.

#### Conclusion

As mentioned in the Introduction, basic emotions, and the universal facial expressions of emotions that are produced because of basic emotions, are an important part of the biologically based, core emotion system. This core system is evolutionarily-based, part of our phylogenetic history, and naturally selected. This system enables all emotions, and especially basic emotions, to have been incredibly adaptive in our evolutionary history, as well as in our daily lives today. They prepare individuals to respond to events in their environment immediately, automatically, and unconsciously. They are rapid information processing systems that help us deal with threats from predators, problems of nature, and problems based in the social complexity of human life.

Although this core emotion system forms an important and crucial aspect of the biocultural model of emotion mentioned above, it is only one part of that model. The existence of the core emotion system does not and should not detract from the strong and amazing contributions of culture and cultural learning to our emotion system and emotional lives. The interaction between biology and culture in human emotions allows for complex social networks and relationships, and enhances the meaning of normal, daily activities. This interaction allows emotions to drive us to pursue happiness, and to be creative in music, art, drama, and work. It motivates us to seek recreation and to engage in sports and organize competitions, whether in the local community soccer league or the Olympic Games. It inspires us to search the sea and space, to create mathematics, an achievement no other species can claim, and an educational system. It allows us to go to the moon, to create a research laboratory on Antarctica, and send probes to Mars, Jupiter, and beyond.

Cross-cultural research on emotion was particularly instrumental to the field of cross-cultural psychology in general and contributed much to today's fervor with culture in psychology. The findings documenting the universality of facial expressions of emotion served as the backbone for much interest in culture and spoke to something unique about humans and humanity that transcended culture. Facial expressions of emotion are the closest thing we have to a universal language.

Finally, we would be remiss if we didn't mention that doing behavioral research on emotion across cultures is incredibly difficult, even though we have many tools and technologies to do so. Behavior coding is labor intensive, and all of the caveats that are associated with cross-cultural research are magnified in the world of behavioral studies. Although there are incredible challenges to this area of research in the future, these challenges bring with them incredible opportunities and potential to make even stronger contributions to our knowledge of this very basic area of psychological science. Future studies promise to develop our societies and social relationships, not only for our survival but also for our common well-being.

#### **Notes**

- 1 Controlled smiles were those that co-occurred with buccinator (AU 14), sometimes in combination with mentalis and/or orbicularis oris (AUs 17 and 24). These lower face actions give the appearance that the expressor is making a conscious effort to control their facial behaviors and/or words, as if they are "biting their lip." That they often occurred with both Duchenne and non-Duchenne smiles suggested that these facial actions qualified the meaning of the smile, adding information to the message of the smile beyond the signal of enjoyment.
- 2 All photographs courtesy of Bob Willingham.

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## Wellbeing Across Cultures

## Issues of Measurement and the Interpretation of Data

#### Robert A. Cummins

Achieving life quality and feeling well are a biological imperative. The motivation to achieve wellness lies at the heart of human striving. But discovering how life quality and wellbeing should be measured is an intellectual challenge. Even the most basic notion of what "wellbeing" might be differs between both disciplines and cultures. For example, economics equates wellbeing with money, while medicine equates it with health. The social sciences, on the other hand, take a broader view, where wellbeing is an overarching construct. This broader construct certainly includes money and health, but also other human concerns such as relationships and purposeful activity. Such broadening introduces the further complication that cultures differ in their valuing of many human attributes, such as independence or religious beliefs. Moreover, many of these cultural differences are subtle, such as the response style people use to answer personal questions about feelings. This chapter will examine these disciplinary and cultural views, with the aim of discovering aspects of wellbeing that are both measurable and universal.

#### **Achieving Wellbeing**

Traditional measures of wellbeing focus on the objective circumstances of living (see Human Development Index, 2017). For example, wealth, medical health, and living standards are commonly used to define wellbeing and life quality. These objective variables are attractive because they are tangible. They can be measured in familiar ways through frequencies or quantities. Moreover, in the tradition of

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the physical sciences, the results can be verified by any number of people using the same techniques of measurement. An additional attraction for cross-cultural comparisons is that such objective measures travel well cross-culturally. Medical health is defined by universal criteria and all currencies can be converted to American dollars.

All this is very comforting to people who define wellbeing by what they can see and touch. The measures are clearly reliable. Less comforting is the knowledge that such measures are not, of themselves, valid measures of life quality. This is because wellbeing also contains a subjective dimension, which concerns how good people feel about their lives. Moreover, the objective measures cannot reliably predict the subjective measures (Andrews & Withey, 1976; Cummins, 2000a). People who are rich and medically healthy can also be depressed. People who are not rich and in poor health can also be happy.

An additional challenge to the traditional objective measures of life quality is that, of the two dimensions, the subjective is by far the most important. If people feel their lives are not worth living, then, as Schalock (1997) asked, what is the use of life? Thus, the first section of this chapter examines Subjective Wellbeing (SWB) in terms of its character and measurement. The second section discusses the application of such measurement across different cultures.

#### The Character of Subjective Wellbeing

SWB has been a topic of systematic scientific study for over 40 years. The publications of Andrews and Withey (1976) and Campbell, Converse, and Rodgers (1976) launched the area into scientific prominence. Both texts demonstrated that SWB data could be reliably measured and that the statistical analysis of such data, using ordinary linear statistics, produced reliable results. Of particular importance, they found measures of SWB to be remarkably stable. It is this reliability and stability of measurement that have made SWB such an attractive new area for quantitative investigation. However, researchers have also encountered many problems in their attempts to create a systematic body of knowledge. Two of the most difficult issues are the lack of a standardized terminology (see Diener, 2006, for a review) and the huge number of instruments that measure different aspects of SWB (Australian Centre on Quality of Life, 2018).

The problems with terminology have been, and remain, an important impediment to communication in this area. Even as the early researchers used the term "happiness" to describe the area of their study, they recognized that the term was ambiguous. For example, Fordyce (1983) described happiness as "an emotional sense of well-being—that goes by many names (contentment, fulfilment, self-satisfaction, joy, peace of mind, etc.)" (p. 484). The problem that Fordyce recognized is that, in common English usage, happiness generally refers to a state of mind

caused by an acute emotional experience, such as enjoying a cup of tea on a hot day. But this is not what wellbeing researchers generally intend to measure. They strive to measure a dispositional state of mood happiness that is much more stable. So, to make this distinction, "trait" or "mood" happiness has come to be known as SWB in order to reduce terminological confusion.

This confusion has led to the other major challenge: differing opinions as to which questions should be asked to measure the SWB construct. Because of this, a surprisingly high proportion of researchers find it necessary to invent their own scale. This proliferation has greatly limited progress in understanding because these scales are of very mixed psychometric quality and many of them measure quite different constructs. The unfortunate result is a confused and massive literature.

Notwithstanding these difficulties, the understanding of SWB has advanced to the point that coherent and testable theories have been developed. This is a fascinating intellectual challenge because such theories must attempt to account for the rather odd psychometric properties of SWB. These include its stability, and its non-linear relationship with other variables, both objective and subjective. One theory that attempts to account for these relations proposes that SWB is managed by a psychological system called SWB homeostasis (Cummins, 2014, 2017).

Homeostasis involves various mechanisms. Some of these concern the use of resources external to the person, such as money, while others are internal to each person, such as perceived control. These various homeostatic mechanisms, described in the next section, act in concert to maintain an average level of SWB that is stable and predictable within countries like Australia (Cummins, Eckersley, Pallant, Van Vugt, & Misajon, 2003). Homeostasis theory is also proposed to apply equally to all peoples, no matter their nationality or living circumstances.

#### Subjective Wellbeing Homeostasis

The theory of SWB Homeostasis proposes that, analogous to the homeostatic maintenance of body temperature, SWB is actively controlled and maintained as a positive mood. This implies that almost everyone has the experience of their lives as positive. Confirmation of this general positivity is provided by the Australian normative ranges for SWB (Capic et al., 2017b, table 6.2). This range has been computed using the combined data from multiple surveys, where SWB has been measured using the Personal Wellbeing Index (International Wellbeing Group, 2013). All results have been standardized onto a 0–100-point scale, from no satisfaction to complete satisfaction. The combined data from 57,951 respondents yields a mean of 75.2 points. A point two standard deviations below the mean corresponds to a value of 50.5 points. Thus, as a result of homeostatic control, over 95% of the people in this random sample regarded their level of SWB as positive.

Homeostatic control aims to maintain this positive sense of wellbeing in the form of a generalized, abstract view of the self, as represented by responses to the classic question "How satisfied are you with your life as a whole?" Given the extraordinary generality of this question, people do not answer by making a cognitive evaluation of their life. Rather, their evaluation reflects a deep and stable positive mood state that we initially called Core Affect (Davern, Cummins, & Stokes, 2007) but is now referred to as Homeostatically Protected Mood (HPMood) (Cummins, 2003). This is a mood, dominated by a sense of contentment, flavored with a touch of happiness and energy. It is this general and abstract state of SWB which the homeostatic system seeks to defend. As one consequence, the level of SWB that people experience has the following characteristics:

- 1 SWB is normally very stable. While unusually good or bad events will cause it to change in the short term, over a period of time, homeostasis will normally return SWB to its previous level (Hanestad & Albrektsen, 1992; Headey & Wearing, 1989).
- 2 Each person has a level of HPMood that is set genetically (Capic, Li, & Cummins, 2018; Cummins, Li, Wooden, & Stokes, 2014). The distribution of these personal set-points within the general population is between 70 and 90 on the 0–100-point scale.
- While the average set-point is 80 points, the measured population level of SWB within Western nations is rather lower at 75 points (Cummins, 1995, 1998). This can be accounted for by the understanding that measured SWB comprises two affective components. One is the weak, positive, unchanging background HPMood. The other is potentially stronger emotional reactions to the experience of life. These two sources combine in consciousness to provide a single value of measured SWB. Thus, if the experienced level of emotion at the time of SWB measurement is stronger than HPMood, the level of measured SWB will differ from set-point, and more strongly reflect the level of the experienced emotion. Moreover, since the chronic experience of emotion is more likely to be negative than positive, due to such influences as poverty or relationship break-down, the overall distribution of population SWB is negatively skewed, producing the mean level of 75 points.

This role of homeostasis, to control the level of experienced SWB by bringing its level back to set-point, explains why levels of SWB show little relation to variations in the chronic circumstances of living (Cummins, 2018a). However, a sufficiently strong, chronically adverse environment, can persistently defeat the homeostatic system and, when this occurs, negative affect dominates conscious awareness and people lose touch with HPMood. When this happens, their perceived level of SWB falls below its homeostatic range. For example, people who experience strong, chronic pain from arthritis (Cummins, Woerner, Tomyn, Gibson, & Knapp, 2007, figure 9.6) or from the stress of caring for a severely disabled family member at home (Hammond, Weinberg, & Cummins, 2014) have chronically low levels of SWB.

4 Homeostasis also acts to limit the upward movement of SWB above each set-point. Cummins, Walter, & Woerner, 2007 reported cumulative SWB data from about 30,000 Australians. A close examination of the demographic variables revealed that the maximum average subgroup level of SWB, considered to be reliable, was about 81.0 points. Thus, this seems to be the maximum SWB that can be maintained as a group average.

So, how does homeostasis defend SWB against the unusually good and the unusually bad experiences of life? The answer we propose is that there are two levels of homeostatic defense, internal, and external, called "buffers."

#### Homeostatic Buffers

Interaction with the environment constantly threatens to move SWB up or down in sympathy with momentary positive and negative emotion. And to some extent this does occur. However, most people are adept at avoiding strong challenges through the maintenance of established life routines that make their daily experiences predictable and manageable. Under such ordinary life conditions, the level of their SWB generally varies by less than 10 percentage points or so from one moment to the next (Anglim, Weinberg, & Cummins, 2015). This variation represents their Set-Point Range. Homeostasis works hardest at the edges of each set-point range to prevent more drastic mood changes which, of course, do occur from time to time. Strong and unexpected positive or negative emotion will shift the sense of SWB to abnormally higher or lower values, usually for a brief period, until adaptation occurs. However, if the negative experience is sufficiently strong and sustained, homeostasis will lack the power to restore equilibrium and SWB will remain below its set-point range. Such homeostatic defeat is marked by a sustained loss of positive mood and a high risk of depression (Cummins, 2010).

Thus, the first line of defense for homeostasis is to avoid, or at least rapidly attenuate, negative environmental interactions. This is the role of the external buffers.

#### External buffers

The three most important external sources for the defense of our SWB are the "Golden Triangle" life domains: having sufficient money, an emotionally intimate relationship, and a meaningful activity. Of these three, the most powerful buffer is a relationship with another human being that involves mutual sharing of intimacies and support (Cummins et al., 2007). Almost universally, the research literature attests to the power of such relationships to moderate the influence of potential stressors on SWB (for reviews, see Henderson, 1977; Sarason, Sarason, & Pierce, 1990).

Money is also an important external buffer, but there are misconceptions as to what money can and cannot do in relation to personal wellbeing. Money cannot shift the set-point to create a perpetually happier person because set-points are under genetic control (see earlier discussion). The true power of wealth to protect

HPMood lies in its capacity to be used as a highly flexible resource (Cummins, 2000b), that allows people to defend themselves against potentially negative experiences. Wealthy people pay others to perform tasks they do not wish to do themselves. Poor people, who lack such resources, have a level of SWB that is far more at the mercy of their environment.

Achieving something personally important each day is the third external buffer. It provides a sense of life purpose through an activity. Similar to the previous two buffers, such engagement is intrinsically pleasurable, described by McKnight and Kashdan (2009, p. 242) as "a cognitive process that defines life goals and provides personal meaning." The crucial nature of this buffer is exemplified by the fact that when people lose this homeostatic buffer through, for example, unemployment, their SWB is severely threatened (Clark, Diener, Georgellis, & Lucas, 2008).

People use these three external buffers as their first-line of defense against homeostatic challenges. When these defenses are breached, internal management processes take over.

#### Internal buffers

The internal buffers comprise protective cognitive devices that are designed to minimize the impact of personal failure on positive feelings about our self. There are many such devices, collectively called Secondary Control techniques (Rothbaum, Weisz, & Snyder, 1982) and a detailed discussion of these systems in relation to SWB appears in Cummins and Nistico (2002).

The internal buffers protect our SWB against the conscious reality of life. They do this by altering the way we see ourselves in relation to some event that is challenging homeostatic control. The internal buffers involve cognitive restructuring, whereby the negative potential of a challenging experience, to damage wellbeing, is deflected away from the core view of self. Thus, the role of these buffers is mainly to minimize the impact of personal failure. The ways of thinking that can achieve this are highly varied. For example, one can find meaning in the event ("God is testing me"), fail to take responsibility for the failure ("It was not my fault"), or regard the failure (e.g., dropping a vase) as unimportant ("I did not need that old vase anyway").

In summary, the combined external and internal buffers ensure that our wellbeing is robustly defended. There is, therefore, considerable stability in the SWB of populations, which is well demonstrated by data generated by valid measures of the SWB construct.

#### **Measuring Subjective Wellbeing**

The Directory of Instruments, available through the Australian Centre on Quality of Life (ACQOL, 2018), lists over 1,000 scales that purport to measure wellbeing in some form. So how can a researcher make a choice from such a daunting list? From the perspective of SWB adopted in this chapter, three scales can be recommended.

The first is one of the oldest. It is the single question "How satisfied are you with your life as a whole?" (Andrews & Withey, 1976). This question perfectly fulfills the criteria for an item measuring SWB to be both personal and abstract (Cummins et al., 2003). No one can compute the answer to the question in terms of cognition. Therefore, it is answered in reference to the ongoing mood state, which normally approximates the set-point of HPMood (Davern et al., 2007). The drawback to using this question, however, is that it is a single item. As such, it is not as reliable as a multi-item scale, so two multi-item scales are recommended.

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) is the most widely used instrument to measure SWB. It is designed to measure global life satisfaction through five items, each of which involves an overall judgment of life in general. The scores from these items are then summed as a measure of SWB. The importance of the SWLS is that it represents an expanded version of "life as a whole." The items are not designed to give individual insights into the structure of SWB. This differs from the second scale to be recommended.

The Personal Wellbeing Index (International Wellbeing Group, 2013) has a quite different design as the "first-level deconstruction" of life as a whole. It contains seven items, referred to as "domains," with each item representing a broad, semi-abstract area of life. The theoretical basis for the PWI is that the domains together describe the experience of overall life satisfaction. Empirically they tend to explain about 50–60% of the variance in "life as a whole." The scale can be analyzed at either the level of individual domains or at the level of a single combined score. The manual is available from www.acqol.com.au/instruments#measures.

In summary, using the data from any of these three recommended scales reveals that the measured SWB construct has considerable stability, at least within the economically developed countries. However, comparisons of SWB between countries are complicated by two forces. One is the proportion of people who are living in circumstances that are severe enough to cause homeostatic defeat. The second is differences in the way their culture has trained people to respond to questions about their own personal feelings.

#### **Cross-Cultural Differences in SWB**

Within the Western media it is common to find reports that compare the levels of SWB, or mood happiness between countries (e.g., Helliwell, Layard, & Sachs, 2018). The assumption in such reports is that the data being compared represent valid SWB differences between cultures, thereby representing meaningful international comparisons of subjective life quality. This assumption is incorrect and simplistic (Cummins, 2018b) There are two reasons why.

The first is the problem of translation. There is often no simple equivalence between the terms used to describe affective states in different languages. Thus, the traditional use of back-translation as a criterion of scale equivalence is insufficient because it can only achieve the best translation, which may differ from the original language version in crucial ways (Russell, 1991). For example, Oishi (2007) used Item Response Theory analysis to compare perceptions of the term "pride" between Americans and Chinese. Although the term was endorsed by Americans who also endorsed other "positive" emotions, it was not similarly endorsed by Chinese. Thus, unlike among Americans, pride is not conceived as a positive emotion among Chinese. As a consequence of such results, there is an emerging consensus that the examination of language alone cannot guarantee that the measure, and the construct the measure is designed to reflect, are equivalent across cultural groups (Kazdin, 2016; Leong & Kalibatseva, 2013).

The second reason that simple comparisons of SWB data between countries cannot be assumed valid concerns cultural response bias. Culture teaches children how to properly interact with other people and a part of this concerns socially acceptable ways of responding to personal questions of feelings. There are several qualitative reviews on the direct, mediating, and moderating effects of culture on SWB (Diener, Oishi, & Lucas, 2003; Spector, 1997; Steel, Taras, Uggersley, & Bosco, 2018) and the empirical consequences of response bias have been well documented (e.g., Lee, Jones, Mineyama, & Zhang, 2002; Stening & Everett, 1984). As one example, people from East and Southeast Asian cultures score lower on measures of wellbeing because they are more reticent to rate themselves at the ends of the response scale when compared to people from Western cultures (for a review, see Kim, Peng, & Chiu, 2008). The reasons for this "Confucian" response bias, as documented by Lau, Cummins, and McPherson (2005) in Hong Kong, are a combination of modesty, concern at tempting the fates by rating oneself too high, and having a different view of what the maximum scale score represents.

As a consequence of Confucian response bias, East Asian cultures tend to report lower average levels of SWB. This is primarily due to their response distribution within samples, on ratings of personal satisfaction or happiness, having a lower proportion of high values than is normal for Western samples. That is, people in East Asia tend to respond 7 or 8 (on a 0–10 rating scale) whereas they would, in the context of Western culture, respond 9 or 10. The operation of this bias reduces the sample mean score, giving the appearance that the people from these cultures have lower levels of SWB than do people from the West.

In order to demonstrate the presence of cultural response bias, it is necessary to eliminate other potential causes. A major potential cause could be lower living standards.

#### Response Bias and Living Standards

The complexity of interpreting results that are dually influenced by both cultural response bias and lower living standards, was demonstrated by Lau et al. (2005). These authors compared the SWB of Hong Kong Chinese and Australians. Apart from the differential cultural response bias between these two countries, the lowest incomes in Hong Kong are relatively much lower than they are in Australia. This can be seen from the respective Gini Coefficients (Hong Kong 537 and Australia .303; Central Intelligence Agency, 2018). Gini coefficients represent the distribution of wealth in a country and values range from 0 (everyone has the same level of wealth) to 1 (one person owns all the wealth). Therefore, the comparative Chinese-Australian SWB data will reflect both these two influences as follows:

- 1 Because people in Hong Kong will avoid the ends of the response scale, the cultural response bias will tend to truncate the distribution, making it more leptokurtic or peaked. The result will be a smaller standard distribution and a reduced mean score because the effect of the bias will be most evident at the top of the distribution.
- 2 Because a higher proportion of people in Hong Kong will be in economic distress, this will tend to extend the SWB distribution downward, making the distribution more negatively skewed and platykurtic or flat. This will tend to decrease the mean and raise the standard deviation.

In summary, the SWB mean score should be less in Hong Kong due to the combined influences of the response bias and income inequality. The standard deviation, on the other hand, should remain much the same due to the opposing forces. And this is what researchers found. The mean SWB was higher for the Australian sample and there was no difference in the standard deviations of the two samples. The authors concluded that this is evidence of a cultural response bias because the effects of the income inequality alone would act to both reduce the mean and extend the standard deviation.

Culture as a biasing agent for reported SWB is an example of culture directly influencing self-report data. Culturally-induced learning also indirectly influences the relations between other subjective variables.

#### Culture as a Moderator Variable

Cultural training extends far beyond response bias to questions of personal feelings. This is just one example of a broader cultural influence that shapes the valuing of multiple life aspects and, indeed, leads to culturally-specific value systems. These different values, in turn, moderate the measured relation between the

experience of life aspects and SWB. As a consequence, the strength of connection between almost any life aspect and SWB will be somewhat dependent on culture.

Two examples will serve to make this point. The first involves religion, which can exert a powerful influence on the kinds of values espoused by its adherents. Indeed, Lavric and Flere (2008) found that not only the strength but also the direction of the correlation between positive affect and religious beliefs depends to a great extent on religious culture.

As the second example, it is well known that cultures differ markedly in the level of social capital that they support, and also that social capital is an effective moderator of common mental disorders (deSilva, Huttly, Harpham, & Kenward, 2007; deSilva, McKenzie, Huttly, & Harpham, 2005). It might therefore be expected that the oft-reported negative impact on parental SWB, of caring for a disabled child, is likely to vary between cultures according to the level of support that the mother receives.

This form of support, called *familism*, is described by strong feelings of loyalty, reciprocity, and solidarity among family members (Marin & Marin, 1991). It involves support provided by the family collective to one another, one's obligations to the family, and the involvement of relatives with the family (Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987). So it should be no surprise that the level of familism is an important factor with respect to caring for a disabled child (Aranda & Knight, 1997; Magilvy, Congdon, Martinez, Davis, & Averill, 2000; Shurgot & Knight, 2004). For example, it is generally found that familism is higher in Latino compared with White families in the USA. Thus, probably due to the level of support that they receive within the family, Latina mothers are less likely to report negative aspects of such caregiving than non-Latina White mothers (Magana & Smith, 2006). Thus, culture is moderating the link between caring for a disabled child and the mothers' wellbeing.

What is clear from this account is that the interpretation of international SWB comparisons must be done very cautiously. This is so, not only in terms of comparative levels of SWB, but also in terms of the interactions between SWB and other variables.

#### Conclusion

In order to make a comprehensive assessment of life quality within a nation, it is necessary to employ both objective and subjective indicators. Both kinds of measure provide different and useful information for policy planners. Making comparisons between nations, however, needs to be done cautiously. While cross-national comparisons based on objective measures appear to be generally valid and reliable, those based on subjective measures are not. Making SWB comparisons between nations is a fraught process. The ways culture and living standards interact to

influence reported SWB are both highly variable and poorly understood. What does seem clear is that the direct comparison of inter-nation SWB levels (Helliwell et al., 2018) is invalid as an indicator of true differences in subjective life quality.

The major usefulness of SWB measurement is as a social indicator within nations. Levels of SWB provide an estimate of homeostatic failure and risk of depression. It is, thus, a useful measure by which to identify areas of relative need within the population, and as a way of tracking the effectiveness of government interventions that involve the allocation of resources (see, e.g., Mavromaras, Moskos, Mahuteau, & Isherwood, 2018). Giving attention to the resources necessary to maintain normative SWB for disadvantaged population sub-groups may be one of the most effective initiatives to enhance population wellbeing and national productivity in all nations.

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## Happiness Around the World

#### Jennifer Zwolinski

In 2012, the U.N. General Assembly declared March 20th to be International Happiness Day, citing "happiness and well-being as universal goals and aspirations in the lives of human beings around the world." This declaration arrived nearly 60 years after the first published empirical comparison of happiness across nations in 1948 (Buchanan & Cantril, 1953). Since then, several ongoing international survey programs have also been developed, including the Euro-barometer (since 1973), the World Values Survey (since 1981), the European Social Survey (since 2002) and the Gallup World Poll (since 2005) (Organization for Economic Co-operation and Development [OECD], 2013). Many findings from these surveys as well as other large-scale cross-national comparisons of happiness and subjective appreciation of life as a whole are archived in the World Database of Happiness (http://worlddatabaseofhappiness.eur.nl). As of 2017, this collection included more than 1,100 measures of happiness in more than 11,000 publications in 166 nations, yielding over 15,000 correlational findings.

The main aim of this chapter is to provide a general overview of some of this literature on happiness around the world. The first section of the chapter will review cross-sectional and longitudinal studies of national happiness. The second section will review the ways that national and international happiness assessments and intervention inform public policy.

#### Ratings of Happiness Around the World

#### How Is Happiness Generally Defined?

One of the most controversial issues in well-being research is the way in which happiness is defined (Delle Fave et al., 2016). Although no universally accepted definition of happiness exists, the experience of happiness is likely to be universal (Ryan, Sheldon, & Deci, 1996). People everywhere are likely to prefer the desirable to the undesirable, and the pleasant over the unpleasant (Diener & Diener, 1995; Veenhoven, 1991). To date, happiness has been used interchangeably with both life satisfaction and Subjective Well-Being (SWB) (Delle Fave et al., 2016; Eger & Maridal, 2015). Although these three terms are related, they represent different qualities. More specifically, whereas happiness tends to be used to describe momentary pleasant affect, life satisfaction describes long-term cognitive evaluation of life as a whole (Eger & Maridal, 2015). Well-being1 tends to be used to describe a combination of both the affective and cognitive components of happiness and life satisfaction (Eger & Maridal, 2015). Despite the challenge of comparing crossnational happiness without a universal definition of happiness, one of the benefits is that participants can conceptualize happiness on their own without researchers imposing their definition of happiness on respondents (Graham, 2011a). This can be quite helpful in understanding cross-cultural views of happiness, as we will see in the studies that follow.

For example, Lu and Gilmour (2004) examined the lay conceptions of happiness between Chinese and American participants by examining free responses on a formal essay in response to the question "What is happiness?" They found distinct differences in the conception of happiness between the two groups. Whereas socially oriented SWB emphasized role obligations as well as harmony and balance within the individual and one's surroundings among Chinese participants, individually oriented SWB emphasized personal accountability and achievement for Euro-American participants. The authors suggested that these different conceptions of happiness provide support that culture molds the meaning of happiness.

Oishi, Graham, Kesebir, and Galinha (2013) investigated the cross-national conceptualization of happiness by examining 30 current international dictionary definitions of happiness. They found that conceptions of fortune, fate, or luck were present in 80% of participant responses (Oishi et al., 2013). The implication is that when completing assessments of happiness, Germans, Russians, Japanese, and Norwegians might be thinking about recent experiences with luck, whereas this consideration might be absent when Americans, Spanish, Argentine, Ecuadorians, Indians, and Kenyans are completing these same assessments.

Delle Fave et al. (2016) asked adults across 12 nations, "What is happiness for you?" They found that, regardless of age and gender, when happiness was described

in psychological terms (i.e., inner state, feeling, or attitude), most participants focused on inner harmony (i.e., inner peace, inner balance, and connection). On the other hand, when happiness was described in contextual terms (e.g., work, health, leisure), most participants predominantly focused on positive and harmonious family and social relationships (Delle Fave et al., 2016). The majority of participants defined happiness as a psychological state, as opposed to a contextual state, which is in line with how most dictionary meanings of happiness were conceptualized by Oishi et al. (2013).

Although many individuals around the world consider happiness to be a positive construct, however defined, not all individuals value happiness highly and equally (Joshanloo & Weijers, 2014). People in non-Western cultures may be more likely to believe that extreme forms of happiness cause bad things to happen. Thus, researchers should not assume that happiness is the "supreme universal good" unless each culture or individual creates and is evaluated by this specific conception of happiness (Joshanloo & Weijers, 2014).

#### Are Most People Happy?

Diener and Diener (1996) reported that most people were happy, whether they were from industrialized societies or from cultures that were substantially different than industrialized cultures, including collectivistic and materially simple cultures (Biswas-Diener, Vittersø, & Diener, 2005). These results for non-industrialized cultures indicated that 84% of the sample scored above neutral levels of well-being, providing further support for Diener and Diener's original findings and also providing evidence that wealth and material comforts of industrialized cultures are not essential for happiness.

Despite the fact that women tend to be less educated on average than men, with lower income and more likely to be divorced/widowed, women still report being happier than men (or there is no gender difference) (Zweig, 2015). This gender difference was observed in nearly all of the 73 countries examined, regardless of the country's developmental status, geographical location, and/or overall well-being (Zweig, 2015). Although women are generally happier than men, this relation is strongest in high-income countries and there is no significant gender difference in happiness in low-income countries (Graham & Chattopadhyay, 2013).

Although average happiness appears to be above neutral levels for most people (Veenhoven, 2012), there are significant differences in happiness between some countries (Veenhoven, 2015). For example, an 86-nation study of happiness based on the World Database of Happiness found that on a rating scale of 0–10, Denmark scored the highest (8.2) and Zimbabwe scored the lowest (3.3) on happiness. In this study, the average national score was 6.5 (Veenhoven, 2011, as cited in Veenhoven, 2012). According to the World Happiness Report in 2017 (Helliwell, Layard, & Sachs, 2017), on average from 2014 to 2016, when individuals were asked to

evaluate the quality of their current lives on a scale from 0 to 10, the top ranked countries (Norway, Denmark, Iceland, Switzerland, and Finland) all had national average scores either above or just below 7.5. These scores were remarkably different from the bottom five ranked countries (Rwanda, Syria, Tanzania, Burundi, and Central African Republic), that had scores ranging from 3.4 to 2.6.

Using multiple indices of happiness, the World Map of Happiness calculates a country's Happy Planet Index (HPI) based on life expectancy, inequality, wellbeing, and ecological footprint (http://www.happyplanetindex.org). Overall scores for the 140 observed countries ranged from 44.7 (Costa Rica) to 12.8 (Chad). Bhutan, the country that promotes Gross National Happiness (GNH) over Gross National Product (GNP), ranked 56, with an HPI score of 28.6; as a comparison, the United States ranked 108 with a score of 20.7 (Jeffrey, Wheatley, & Abdallah, 2016). Even though most people are generally happy, the discrepancy between the highest and lowest scoring countries is remarkable.

#### Do National Happiness Reports Change Over Time?

Happiness has not only remarkably changed for some countries; it has risen slightly in most countries of the world (Veenhoven, 2015). Using the World Database of Happiness, data from 67 countries covering the period 1950–2010 show that happiness has been rising in most nations (Veenhoven, 2017). Data observed across the last three assessments of the World Values Survey (2000–2004, 2005–2009, 2010–2014) confirm that, at least since the start of this millennium, most people have been relatively happy (Minkov & Bond, 2016).

Are these changes in happiness across most countries related to changes in economic affluence? Easterlin (1974) investigated the relation between happiness and income using a dataset involving 30 surveys in 19 countries from 1946 to 1970. His findings indicated a positive association between happiness and income for within-country comparisons. However, cross-country comparisons and time series data yielded a weaker relation between income and happiness (Easterlin, 1974). Deaton's (2008) review of the data concerning happiness and income provided three lines of evidence against the Easterlin paradox.

In response to dissenting views of the income-happiness association, Easterlin and Angelescu (2009) argued that this may be due to a failure to distinguish between the short-term and long-term temporal relation between happiness and income. In the short term, when fluctuations in macroeconomic conditions dominate the association, happiness and income are positively related. However, in the long term, happiness and income are unrelated (Easterlin & Angelescu, 2009). Easterlin, McVey, Switek, Sawangfa, and Zweig (2010) analyzed the happiness-income link examining data across an average of 22 years for a range of countries (i.e., rich and poor, formerly communist and capitalist) representing five continents. Their results indicated that, at one time but not over time

(i.e., usually at least a 10-year period), economic growth within a country was associated with more happiness. They suggest that one implication of these data is that more research is needed to inform policy on personal concerns (e.g., health and family) and material preferences rather than increasing material goods (Easterlin et al., 2010).

This suggestion is in line with other research showing that non-economic factors are more predictive of happiness than economic factors. Data from the World Values Survey confirmed that traditional economic data (e.g., income) are weak predictors of SWB and happiness, relative to cultural factors (e.g., power distance or gender egalitarianism; Ye, Ng, & Lian, 2015). Mental health has also explained more of the variance in happiness in Western cultures relative to income (Clark, Flèche, Layard, Powdthavee, & Ward, 2017). These results underscore the need to consider both social capital and economic data when National Statistics Offices are attempting to understand national well-being (Abdullah, 2011).

#### Are Observed Differences in Happiness Simply Due to Cultural Bias?

Numerous scholars have questioned whether some of the observed cross-national differences in happiness were due to language/translation differences, cultural bias, and/or social inequality. In response to the issue of language and/or translation issues, many studies fail to show consistent differences due to subtle variations in the meaning of key terms used in the questions in different languages (Ouweneel & Veenhoven, 1991). Gundelach and Kreiner (2004) found that language alone did not account for differences in cross-cultural variation in happiness. Veenhoven (1993) also maintained that there are no consistent language effects, although some researchers have argued that happiness can be interpreted differently in different languages (Mathews, 2006).

Ouweneel and Veenhoven (1991) evaluated the possibility that cross-national differences in happiness were due to differences in social desirability (e.g., whether there was a greater difference in responses regarding "general happiness" compared to responses about "happiness in the past few weeks"). They assumed that the latter would be less vulnerable to desirability distortion because it is less of a failure to report being more recently let down than to admit one's life is unsatisfactory in general. They did not find support for this assumption.

Even if the differences in happiness may not be specific to language/translational issues or to a social desirability bias, researchers have observed other cultural differences that influence how individuals respond to questions about happiness. For example, North Americans reported more positive self-views and self-serving biases, and engaged in more self-enhancement than East Asians (Suh, 2000). The high happiness scores reported in the U.S. may be partly due to social norms toward positive affect (Argyle, 2001). Rates of mental health problems such as depression and anxiety in America corroborate this view

(Morris, 2012). In individualistic cultures, there was more pressure to display positive emotions, whereas collectivistic cultures seemed to be less restrictive toward positive emotions (Safdar et al., 2009). These results suggest that the local social context should be considered in order to fully understand happiness across cultures (Mathews, 2006).

Even beyond cultural differences, perhaps observed group differences in happiness are simply part of broader differences in well-being which result from "quality of society" or societies with better living conditions (Ouweneel & Veenhoven, 1991). After controlling for real national income, Ouweneel and Veenhoven (1991) found that happiness tended to be higher in countries that provided citizens with material comfort, social security, education, health care, and political rights—explaining 80% of the variance in average happiness in the 28-nation sample. Veenhoven (2008) examined happiness and three types of freedom (private, political, and economic) in 126 countries across the years 2000–2006. Almost universally, although strongest for richer countries, individuals associated happiness with all three types of freedom (Veenhoven, 2008). This correlation between freedom and happiness was also observed more recently (Veenhoven, 2017).

Another explanation for national differences in happiness is simply that some people or cultural groups are less happy. Since the 1980s, Russians' reported happiness has been low in comparison to other nations and Russians have been less happy than during the Communist period. Doubts were raised about the validity of these self-reports, indicating that the data may not actually reflect self-appraisals, due to distortions in translation and to a differential response bias. Veenhoven (2001) found that Russians' unhappiness was consistent with the problematic economy and their average satisfaction was lower than predicted, given their life expectancy, mood, and suicide rates. Veenhoven (2001) proposed that this unhappiness was not due to the Russian character as much as to social transitions that were occurring during the time of the study. This is not to say that all studies have found that Russians are truly experiencing more unhappiness; rather, Russians may be more apt to simply inhibit their expression of happiness (Sheldon et al., 2017).

Veenhoven (2012) addressed some of the cultural bias considerations and found that it is still acceptable to compare happiness across nations. As with all scientific literature, these methodological considerations emphasize the need to be sensitive to how assessment and/or cultural explanations may have affected the results of these studies, as well as the extent to which the results can be generalized to other groups.

Based on some of the findings presented earlier in this first section, specifically, that happiness around the world has been related to social factors as well as economic growth, should governments play a role in increasing happiness around the world? If so, what role can happiness assessment and intervention play in improving public policy? This next section will attempt to answer these questions.

#### Why Should Governments Care About Happiness?

One reason that governments should care about happiness is because most people, at least in Western cultures, value happiness highly. Happy people also fare much better on the domains of love, work, and health, compared to unhappy people, according to meta-analytic research evaluating 225 reports (Lyubomirsky, King, & Diener, 2005). Happy people participate more in community organizations, are more liked by others, are less likely to get divorced, tend to live slightly longer, perform better at work, and earn higher incomes. Thus, another reason that governments should care about happiness is that happiness benefits individuals and society.

Haybron (2008) addressed the question about whether governments should strive to increase individuals' happiness by considering the kinds of environments that are conducive to human flourishing. Do individuals fare best when they have the greatest possible freedom to make decisions about their own lives based on their own priorities? Or do they fare best when social or physical contexts influence or constrain individuals' choices (e.g., by favoring certain ways of living or goods)? Haybron (2008) argued that individuals may fare best with the latter because individuals have human needs that are not best left to individual choice. Despite the controversy, this stance is worth considering. Happiness may be less influenced by individual choice and more influenced by social and physical support networks that shape the way individuals live (Haybron, 2008), further suggesting that governments do have a role in promoting individual happiness and reducing inequality (Ott, 2011).

#### How Can the Literature on Happiness Inform Social Policy?

Given that happiness is valued by most people and that it is associated with positive outcomes for individuals and society, findings about national happiness can play a valuable role in creating social policy decisions. Veenhoven (2004) argued that research on happiness can serve social policy in several ways. First, this research can assist in evaluating citizens' dissatisfaction that is not traditionally considered in the political process. Second, happiness research can serve social policy by providing information about the effectiveness of governmental interventions, including income supplementation, job creation, and housing programs. Third, happiness can serve policy by providing feedback on the relative effectiveness of the policy regime as a whole (Veenhoven, 2004).

Graham (2009) elaborated on these suggestions but she also cautioned researchers about directly applying research findings from happiness studies to policy changes. Given the benefits of happiness, policy makers may assume that a good way to apply a more population-based (or government) intervention is to

simply try to start making citizens as happy as possible. This would not be a good application of the data for at least two reasons. First, the effects of happiness on important life outcomes appear to be nonlinear (Diener, Nickerson, Lucas, & Sandvik, 2002; Oishi & Koo, 2008). For example, people who rate their happiness in the 7–9 range on a 10-point happiness scale tend to report better occupational, health, and well-being outcomes, relative to their counterparts who report the top happiness values on the 10-point scale (Graham, 2009). A second reason is that the optimal level of happiness varies across context (Oishi, Diener, & Lucas, 2007). For example, individuals with the highest levels of happiness tend to fare best in terms of close relationships and volunteer work, whereas individuals with slightly lower levels of happiness tend to fare best on income and education (Oishi et al., 2007). Clearly, thoughtful assessments are critical to ensure that the appropriate policies are being developed to improve well-being.

#### How Can Researchers Create Happiness Assessments That Effectively Inform Policy?

Psychologists Ed Diener, Martin Seligman, and Daniel Kahneman encouraged governments to create national well-being accounts to supplement existing economic data (Huppert et al., 2006). Interdisciplinary forums and discussions featuring economists and philosophers, as well as psychologists, are needed to collect important feedback about different views of well-being (Weijers & Jarden, 2013). This interdisciplinary approach is important because the way that happiness is defined has implications for how the happiness data will influence social policy (Graham, 2009).

Although some governments may choose a single assessment (e.g., National Happiness Indicator) as the sole measure of social and economic development, some researchers suggest the use of a "dashboard" assessment (Seligman, 2011) that includes multiple happiness indices combined with discussion of strengths and weaknesses so that diverse views of happiness are considered (Frey, 2017). For example, societies must pay careful attention to social and psychological variables that are important to constituents' happiness (Debnath & Shankar, 2014). Although the undefined nature of happiness allows for flexible assessment across studies such as those described in the first section of this chapter, when evaluating happiness to inform public policy, it is critical to have a more specific definition of happiness (Graham, 2009), with metrics that are acceptable and measurable (Graham, 2011b). This will allow policy makers to evaluate outcomes related to happiness for their constituents. To date, the focus on well-being assessment for policy development has been specific to measures of SWB. Although the aim of this chapter is to review happiness, however operationalized by researchers and participants, due to the overlap of happiness and SWB, the following two

examples of national assessments for SWB will be presented to show how these national assessments can be effectively used to understand quality of life among diverse groups of individuals.

The Organization for Economic Co-operation and Development (OECD) is a 35-country consortium whose shared goal is to increase social and economic well-being around the world. As part of Better Life Initiative, the OECD produced a set of guidelines to allow for more consistency in measuring SWB across countries. They measure society's progress on well-being across 11 measures of material living conditions and quality of life (e.g., income, health, civic engagement, community, life satisfaction) (Organization for Economic Co-operation and Development, 2013). The OECD (2013) summarized important methodological considerations (e.g., question wording and response format, question order and context effects, survey mode and timing, response style, and international comparability) in cross-national well-being assessment. They also offered recommendations and priority work for each of these areas. Ultimately, the goal of these guidelines is to improve existing well-being metrics in order to inform policy intervention for countries around the world.

The U.K. Measuring National Well-being (MNW) program (Office of National Statistics, 2017) has implemented many of the suggestions offered by the OECD. The MNW program was established in 2010 to provide a comprehensive understanding of life in the U.K. beyond economic indicators (e.g., GDP). It creates bi-annual reports on the progress of various subjective (e.g., job satisfaction) and objective (e.g., unemployment rate) aspects of citizens' well-being including health, personal finances, and crime (Office of National Statistics, 2017). The most recent data, comparing changes in well-being from 2014 to 2015 showed that 35% of constituents reported an improvement in well-being (e.g., less depression and anxiety, more job satisfaction) (Office of National Statistics, 2017). The indicators used to evaluate well-being are in line with suggestions for a dashboard approach that examines psychosocial variables in a specific and measurable manner as suggested by Graham (2009). National assessments such as the MNW can be used not only to inform government about the state of the U.K.'s well-being but also to inform policy decisions to ameliorate overall well-being in the U.K.

### Which Models of Government Intervention Are Leading the Call to Increase Happiness Around the World?

One group of interdisciplinary scholars who aim to promote the highest quality research in the science of well-being is the Cambridge Well-being Institute (WBI). Members of the WBI emphasize that happiness interventions need to be evidence-based. Accordingly, they are developing criteria for empirically based interventions including specific characteristics of the intervention (e.g., content, mode of

delivery, duration, standardization), characteristics of the evidence for effectiveness (e.g., whether the trial was double-blind and placebo-controlled), and characteristics of the individual (e.g., individual differences in temperament, affect, age, gender, education). The WBI website offers information about ongoing intervention programs that focus on children, patients, and the workplace (http://www.cambridgewellbeing.org).

The New Economics Foundation (NEF) is another group that works to provide guidelines on social policy interventions to improve well-being (http://www.neweconomics.org). Challenging the assumption that government's primary role is to improve the economy, the NEF maintains that a greater effect on well-being can be accomplished by changing the work-life balance and ameliorating one's living environment and the vibrancy of local communities (Marks & Shah, 2014).

These targeted interventions are in line with other best practices shown to increase happiness. For example, de Graaf, Boniwell, and Levine (2017) noted that reductions in unemployment and corruption, and increases in interpersonal trust and trust in situations, personal freedom, and autonomy will increase happiness. The Legatum Institute's year-long Commission on Well-Being and Policy (http://li.com/programmes/the-commission-on-wellbeing-and-policy) set four priority areas to increase well-being through public policy. These priority areas include mental health and character building (e.g., build resilience in schools), community (e.g., promote volunteering), income and work (e.g., increase well-being at work), and governance (e.g., empower citizens) (O'Donnell, Deaton, Durand, Halpern, & Layard, 2014).

Bhutan is one country that regularly tracks happiness, and integrates well-being standards into public policy. King Jigme Singye Wangchuk of Bhutan puts more emphasis on GNH than Gross Domestic Product. The GNH represents nine domains of happiness including psychological well-being, health, time use, education, cultural diversity & resilience, good governance, community vitality, ecological diversity & resilience, and living standards (Urah, Alkire, Zangmo, & Wangdi, 2012). It is noteworthy that even though this assessment is specific to happiness, the domains used to evaluate happiness overlap with the domains used to measure SWB by the OECD and the MNW. Recent data indicate that approximately 40.8% of the population are happy, with the remaining sample identified as not yet happy (Urah et al., 2012). The process of review is apparent in a series of five-year plans, with the intent to increase happiness using policy for all citizens, including the not-yet-happy citizens.

Just as there were important methodological considerations in research on cross-national data in the first section, there are also important methodological considerations with the assessment and interventions on happiness that relate to policy, moving forward. Methodologically, more rigorous research methods are needed (e.g., experimental, quasi-experimental, and longitudinal studies; Diener et al., 2017) beyond descriptive survey data presented in this chapter and primarily used in the cross-national happiness literature. Sophisticated research methods

will allow researchers to examine the interaction of individual-level and country-level factors on happiness (Ono & Lee, 2016). The use of informed and culturally sensitive measures across multiple times points will enable researchers to have an informed understanding of changes in happiness across time.

#### Conclusion

Numerous cross-national studies on happiness have provided valuable information on happiness around the world since the first national study on happiness was published in 1948 (Buchanan & Cantril, 1953). With insight into these findings on happiness around the world, these data can be used to help people around the world to lead happier lives. Interdisciplinary researchers have led the call for national assessments of well-being (Huppert et al., 2006). The OCED and the Commission on Well-Being and Policy, respectively, have worked diligently to create guidelines for assessment and priority policy areas to promote well-being around the world.

Bhutan is leading the charge as one country that has successfully applied well-being standards to public policy using ongoing efficacy assessments to promote GNH. It will be fascinating to see how newer programs such as the Better Life Initiative and Measuring National Wellbeing will promote well-being in the years to come. By working together, researchers and policy makers can meet the aspirations set forth by the U.N. when they created International Happiness Day.

#### Note

1 A more thorough examination of well-being across cultures is described by Robert A. Cummins in Chapter 25 in this volume.

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# Part X Social Psychology

Social psychologists have long been interested in the role of culture in particular, and environmental situations in general, in influencing behavior. For example, in 1966, the *Journal of Social Psychology* began including a section titled "Cross-Cultural Notes," an effort that predated such important publications as the *Cross-Cultural Psychology Bulletin* and the *Journal of Cross-Cultural Psychology*. Social psychology encompasses a wide range of the field, including such aspects as diversity, cultural influences on individual identity and attribution of causes for behavior, the role of attractiveness in formation of relationships, and the nature of organizations across cultures.

The social situation influences our behavior in many ways as we form attitudes, experience persuasive arguments, make decisions, decide to conform (or not), and establish our cultural identify. Culture is thus central to our understanding of social influence. And when people behave in these and many other situations, we inevitably draw conclusions about the reasons for their behavior. Much early research on these attributions studied Western samples, finding biases that investigators assumed were associated with characteristics of Western culture. More recent research, however, has shown that the connection between attribution and culture is both more complex and more mixed than early studies suggested.

Although much research has investigated differences in interpersonal attractiveness across cultures, current researchers seek to learn the extent to which personal relationships are grounded in the reality of particular cultures. Specifically, it is of interest to note that the role of attractiveness as a contributor to positive life outcomes may be quite different across differing types of cultures.

For a variety of reasons, researchers have often overlooked Africa and its richly varied cultural contributions to human behavior. In this section we will learn something of the role of intercontinental, cross-border, and interethnic cross-cultural interactions and their contributions to an understanding of cross-cultural psychology in Africa. The Sub-Saharan cultures of Africa provide opportunity for enhanced illumination of cultural phenomena in settings with needs far greater than those of the so-called "developed" world.

## Social Influence A Cross-Cultural Perspective

#### Tyler Collette and Richard L. Miller

Social influence occurs when an individual's thoughts, feelings, attitudes, or behaviors change as a result of interaction with another individual or group. Social influence can occur when the change is an attempt to adhere to social norms or as a result of a direct or indirect request or order from someone. At the core of social influence research is the study of factors that promote attitude change which, according to the classic Yale Attitude Change approach (Hovland, Janis, & Kelley, 1953), involves three core components: (a) the nature of the source (e.g., credibility, power, similarity of the communicator); (b) the nature of the message (e.g., quality, perceived genuineness, emotional content); and (c) the nature of the audience (e.g., in-group/out-group members, social comparison others).

While the Yale approach has provided many interesting insights into the process of social influence, it is important to understand that social influence takes place in a cultural context. Socialization processes are culturally relevant, and culture influences how we interpret the appropriateness of influence techniques as well as how we interpret and understand social influence (Han & Shavitt, 1994). Much of the classic research on social influence was conducted in Western industrialized countries using ad hoc groups of strangers as participants (e.g., Asch, 1951; Haney, Banks, & Zimbardo, 1973; Sherif, 1935), a situation that does not translate to the cultural realities of less industrialized societies. In fact, cross-cultural research has demonstrated that many of the findings based on Western approaches do not hold constant across cultures. In addition, there are many forms of indigenous social influence that occur distinctively within specific cultures (Smith, 2013). Among these is *guanxi*, a Chinese term that describes a personal connection between individuals, which encourages them to maintain a long-term relationship embracing mutual commitment, loyalty, and obligation (Chen & Chen, 2012).

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In many Arab nations, the role of *wasta*, that is, linking with those in key positions, is an important factor in social influence (Cunningham & Sarayrah, 1993), while in Japan individuals often consult privately with others to lay the foundation for change and build consensus (*nemawashi*) before publicly engaging in social influence (Fetters, 1995).

In this chapter we will explore cultural factors that modify our understanding of social influence beginning with a review of source factors, including credibility, power and power distance, and minority influence. The second section describes message factors, including message consistency (e.g., foot in the door), emotional and fear appeals, nonverbal messages (e.g., the role of gesturing), and context effects. The third section in this chapter will focus on the group, including research on conformity, social comparison, the risky shift, and groupthink. The fourth section on influence processes examines the role of reciprocity, social proof, scarcity, in-group/out-group differences, status hierarchy, and cognitive dissonance. Finally, we will address cultural factors that promote resistance to persuasion, including psychological reactance.

#### **Source Factors in Social Influence**

The social influence literature has examined several mechanisms that contribute to the effectiveness of credible and powerful sources as well as the effectiveness of sources outside the majority. Research in this area focuses on the characteristics of a persuasive source and how persuasive sources can affect attitude and behavioral change by serving as peripheral acceptance cues or by influencing the thinking of the targets of social influence.

#### Source Credibility

Aristotle recognized the impact of source credibility on social influence and proposed that credibility rested on expertise, good moral character, and good will (Rapp, 2010). Research originally conducted at Yale University found that the two main factors contributing to the credibility of a source were trustworthiness and expertise (Hovland & Weiss, 1951). Other factors found to contribute to source credibility include intelligence, attractiveness, and achievement (Pompitakpan, 2004).

However, Okabe (1983) suggested source credibility differs across cultures. In general, while individualists are more likely to be influenced by sources who are trustworthy, expert, intelligent, and high achievers, collectivists are more likely to respect older, male communicators from famous families (Triandis, 1994). For example, King, Minami, and Samovar (1985) found that in thinking about source credibility, Americans valued competence (expertise) and character

(trustworthiness), while Japanese also valued consideration and appearance. In Africa, family and tribe are important factors that contribute to source credibility (Boykin, 1983), while in China, virtuous action is important (Hofstede, 1991) and among African-Americans, a source from a subculture was only considered credible when the audience was also an individual from that subculture (Brumbaugh, 2002).

Source credibility can relate to power distance. Fikret Pasa (2000) found that for Turks, higher status individuals were seen as more credible, even if the lower status person was known to possess other sources of credibility, for example, attractiveness. Pornpitakpan and Francis (2000) found that people in Thailand, a high power distance country, were more likely to be affected by the credibility of the communicator than those in America, a low power distance country.

#### Power and Power Distance

One definition of power is the ability to influence others. Sources of power include power related to one's position and power related to one's personal traits. According to French and Raven (1959), position power rests on one's authority within a hierarchy (work, family, community), opportunities to coerce others, and/or control over resources. Personal power rests on expertise and/or attractiveness. In addition to these sources of power, cross-cultural psychologists have identified additional sources of power that can promote social influence. One of these is relational power that stems from individuals' mutual dependence and membership in personal networks (Fu & Liu, 2008). Culture also affects individuals' choice of power-based influence strategies. For example, Fu and Yukl (2000) found that American managers preferred to use rational persuasion, consultation, and exchange while Chinese managers preferred to employ coalition formation, appeals to superiors, personal appeals, and gift giving as influence tactics.

In the words of George Orwell in Animal Farm, "All animals are equal, but some animals are more equal than others." One of the cultural dimensions identified by Hofstede (1991) is power distance, the manner in which power is distributed within a society and the extent to which the less powerful are willing to accept an unequal distribution of power. In high power distance cultures (mostly agrarian and collectivist), people are more likely to recognize and respect authority figures and to comply with social influence that emanates from those authority figures. High power distance cultures, such as India and the Arab world (Najm, 2015), are more likely to maintain a rigid social hierarchy and promote a relationship of dependence between subordinates and superiors, while in lower power distance cultures such as northern Europe (Luptáková, Vargic, & Kincel, 2005) and North America, the relationship is more likely to be one of interdependence. Thus, bypassing a superior in a high power distance culture would be seen as insubordination, while in a low power distance country it would be viewed as less disrespectful. In a review of research on power distance, Khatri (2009) found that employees in high power distance cultures prefer carrying out managers' decisions rather than

participating in the decision-making process, and that older and more senior employees are influential, not because of their competence but because of their age and tenure. Khatri also found that high power distance promoted vertical communication patterns, self-censorship by employees, and quick implementation of decisions made by management. In addition, greater power distance can lead to lower levels of moral development, an increase in unethical behavior (Lan, Gowing, McMahon, Rieger, & King, 2008), and a greater likelihood of making destructive decisions (Illies & Reiter-Palmon, 2008).

#### Minority Influence

Minority influence is a form of social influence that occurs when a member or members of a minority group convince others to reject a majority norm (Moscovici, 1980). Although early research suggested that consistency was important in contributing to effective minority influence (Moscovici & Personnaz, 1980), subsequent research has suggested that minority influence is most effective when information is presented that the majority does not know or expect. This can lead to renewed attention to the issue on the part of the majority (Wood, Lundgren, Ouellette, Busceme, & Blackstone, 1994). From a cross-cultural perspective, collectivists are more likely to pay attention to minority views if the source is similar to them (family, tribe, community). Thus, in-group minorities tend to be more successful in changing minority views than out-group minorities (Maass & Clark, 1988). Another factor that can affect minority influence is high status. In Japan, Koseki (1989) found that when a member of a group speaks first and confidently (a measure of high status in Japan), they can influence the majority. On the other hand, research by Smith and Bond (1993) suggested that collectivists may be less likely to engage in minority influence because deviation from majority positions may lead to negative outcomes (e.g., ostracism or banishment), whereas individualists are more likely to pursue minority influence activities because their culture promotes autonomy and individual achievement. Finally, a minority source that appears flexible and willing to compromise is more likely to assert influence than one who is rigidly consistent in his/her views (Atsumi & Sugiman, 1990)—a finding that supports the collectivist value of maintaining harmony and balance.

#### **Message Factors in Social Influence**

The structure of a persuasive message can have a powerful influence on its effectiveness. In general, cross-cultural research has shown that collectivists tend to focus on process, what is said or done, while individualists use logic,

argument, and proof. This difference causes several well-known message factors to have differential effects across cultures.

#### Consistency

Generally, people want their attitudes and beliefs to be consistent with their behavior (Festinger, 1957). In many cases, individuals are influenced by their existing values or prior commitments due to a desire to exhibit behavior that reflects personal choices. Freedman and Fraser (1966) found individuals who agreed initially to either sign a petition or put up small signs were more likely to comply with a larger request to place a large sign in their front yards than individuals who were only asked to put up the large sign. This phenomenon has come to be called the foot-in-the-door technique and has been well documented in the social influence literature (Beaman, Cole, Preston, Klentz, & Steblay, 1983; Burger, 1999; Pascual, Carpenter, Guéguen, & Girandola, 2016).

Although this technique has shown consistent results in North America, it does not always work across cultures. Research by Cialdini, Wosinska, Barrett, Butner, and Gornik-Durose (1999) illustrated a potential cultural stumbling block that had been largely ignored. Polish and American participants were asked to take part in a survey that determined hypothetical compliance to a request that they had either always, half of the time, or never complied with before. Polish participants were not likely to consider their past behavior as an indicator for their future compliance, whereas American participants did. More recent research has examined the predictive power of small request compliant behavior. Petrova, Cialdini, and Sills (2007) found distinct differences in their field experiment between Asian and U.S. participants when a request was made to take part in a short survey. After the initial survey, participants were contacted a month later to request participation in a much longer survey. U.S. participants complied with the second request at a significantly higher rate than Asian participants. Furthermore, the authors found that individualists were more likely to conform to the foot-in-the door than were collectivists.

Using compliance-driven messages can be culturally dependent, and care should be taken when applying such techniques in collectivist cultures. A 2008 study on influential messages from social media websites found distinct differences in marketing strategies. The social networking website Facebook, at the time took an assertive, mechanical approach to profile creation, invitation of friends, responding to others' messages, and returning frequently to the site. Mixi, a Japanese social media site, instead used a foot-in-the-door technique to subtly and indirectly influence Japanese social media consumption (Fogg & Iizawa, 2008). The authors suggested that different cultural components drive the success of these different strategies: direct versus indirect interactions.

#### Emotional/Fear Messages

Emotion is an essential part of the human experience. Our reliance on emotion pushes us toward discovery, love, loss, and war. Its importance has lent itself to a wealth of research aimed at answering questions about this guiding characteristic. In particular, social influence researchers have extensively explored the relations between attitudes, emotions, and persuasion (Tannenbaum et al., 2015; Witte & Allen, 2000).

Emotion can influence our attitudes in a number of ways. When we aren't thinking particularly hard about the content of a message, our emotions guide our attitudes in a way that is consistent with our emotions. However, emotions can also bias our thinking in support of a message if the message itself is emotionally appealing (Petty & Briñol, 2015). Researchers have become increasingly interested in the interaction between emotion and culture (Elfenbein & Ambady, 2002; Kitayama, Mesquita, & Karasawa, 2006; Markus & Kitayama, 1991), in part due to its promise as an effective advertising tool in an increasingly globalized market (Aaker & Williams, 1998; Lee & Park, 2012).

Culture can affect the success of emotional appeals in a number of ways. For example, Lee and Park (2012) examined the influence of cultural orientation on the effectiveness of fear arousing messages. Collectivists were more affected when anti-smoking fear messages were focused on the participants' effect on their family and close relationships. On the other hand, individualists were more affected when fear messages highlighted the personal threat smoking presented for the participant. Fear appraisals that focus on physical threats do not have the same success in collectivist cultures as they do in individualist societies; examples include dying from a drug overdose (Williams, Briley, Grier, & Henderson, 1998) or smoking (Laroche, Toffoli, Zhang, & Pons, 2001).

The prevalence of emotional appeals varies by culture as well. Hong, Muderrisoglu, and Zinkhan (1987) found that American ads expressed far more instrumental and social comparative imagery than Japanese ads, which were more emotional and/or conscientious. However, culture and emotion do not always demonstrate such a clear east/west, individualism/collectivism difference.

Aaker and Williams (1998) found that the success of ego-focused, compared to other-focused emotional appeals was influenced by the participants' cultural orientation. Individualists, counterintuitively, valued other-focused emotional appeals more than collectivists, while the opposite was true for collectivists. The authors suggested that sometimes novel cognitive appeals, or appeals that are not as heuristically accessible, can be more easily incorporated through an emotional response rather than through a heavy cognitive focus. Thus, when individualists were presented with an other-focused appeal, their emotions guided their attitude more quickly than did a longer cognitive process (Aaker & Williams, 1998).

#### Nonverbal Communication

Peter Drucker once said, "The most important thing in communication is hearing what isn't said" (cited in Overton-de Klerk, & Verwey, 2013, p. 1). From his perspective, if you wanted to stay ahead in business negotiations, it was important to understand the nonverbal cues encoded within a message. Nonverbal communication serves the purpose of complementing or accenting language to portray emotions or attitudes by replacing spoken language (Argyle, 1972). This is a rather robust notion cross-culturally (Ekman et al., 1987; Tracy & Matsumoto, 2008). However, the effect and persuasive success of nonverbal messages are intricately tied to culture.

Cesario and Higgins (2008) explored aspects of nonverbal persuasion by examining the relation between motivational orientation and nonverbal cues. They found that it was vital that the message expressed through nonverbal cues be consistent with the motivational orientation of recipients, particularly when engaged in cross-cultural communication. For example, the use of silence is very important in Japanese communication. Silence conveys truthfulness, social discretion, embarrassment, defiance, and even a subtle way of saying no while maintaining social harmony (Lebra, 1987). In business negotiations in Japan, Americans expressed discomfort during business interactions because Japanese buyers would often go silent for prolonged periods after an offer or proposal had been made (Graham & Andrews, 1987).

Although differences in nonverbal communication can vary widely across cultures (Kirch, 1979; Phutela, 2015; Russell, 1994), it is important to consider how nonverbal universals are moderated and redefined depending on the cultural context. For example, smiling is often considered a universal sign of happiness, pleasure, and even trustworthiness (Miles, 2009; Otta et al., 1994). In contrast, Krys et al. (2016) found that high uncertainty avoidance led participants to perceive smiling as a lack of intelligence. Furthermore, in a culture felt to be corrupt people who smiled too often were less likely to be trusted.

#### Context

We can better understand context by applying the elaboration likelihood model. Petty and Cacioppo (1986) established this model to define what they considered cognitive routes to persuasion: central and peripheral. The central route is influenced by careful consideration of information. The peripheral route is defined by more indirect means of persuasion such as visual cues or messages bound by context. Aaker and Maheswaran (1997) found that cue diagnosticity could account for cultural differences by analyzing how participants evaluated indirect cues associated with a message—in other words, how cues associated with a message

influenced both the message's persuasive power, and which route it utilized for such power. Similarly, Pornpitakpan and Francis (2000) explored the success of persuasive messages through a context-dependent lens. Taiwanese participants, who scored higher in long-term orientation, power distance, and collectivism, were more affected by source expertise than Canadian participants.

Whereas source expertise might be considered a part of the peripheral route to persuasion in the West, Taiwanese participants perceived influential sources as integral to the message presented. In this respect, cultural differences can reflect contextual differences when individuals use effortful, compared to automatic, processing of persuasive information (Bardi & Goodwin, 2011; Pornpitakpan & Francis, 2000). Similar cues can be processed differently, and context is a powerful driving force behind such differences. How a message is propagated within a culture can have profound effects on its success as a persuasive message.

#### Focus on the Group

#### Conformity

All cultures promote a degree of conformity in order to promote harmony, diminish social unrest, and elicit cooperation to ensure the maintenance of cultural norms and values. However, the value and extent of conformity pressures vary from culture to culture. While American parents might ask, "If all your friends jumped off a bridge, then would you do it too?" Japanese parents are more like to say, "deru kugi wa utareru," which roughly translates as "the nail that sticks out is the one to get hammered." Thus, although conformity is often portrayed negatively in Western societies, Horike (1992) found that the Japanese identified conformity as the most important factor underlying their humanity.

Cross-cultural research has found clear cultural differences in conformity. For example, using the traditional Asch paradigm, Brazilians, Fijians, and Chinese conform at a level similar to North Americans; while Germans and Japanese are less conformist and the Bantu of Rhodesia are more conformist (see Moghaddam, Taylor, & Wright, 1993). Williams and Sogon (1985) found that Japanese participants, traditionally collectivists, were less likely to conform when influenced by strangers than by in-group members, a finding consistent with the conclusions of Takano and Sogon (2008), who also found that Japanese participants were less likely to conform during a traditional Asch line experiment than their American counterparts. Conformity pressures can change over time; Americans, for example, have become less likely to conform over the years (Bond & Smith, 1996). This shift can also be seen in countries like Japan, but is explained on the basis of conforming to be unique, a phrase that could be seen as an oxymoron (Knight & Young Kim, 2007). Uniqueness in this context means conforming to a unique group in order to express one's uniqueness.

There are many possible explanations for cultural differences in conformity, including ecological and/or economic variability (Van de Vliert, Van der Vegt, & Janssen, 2009), modes of subsistence (Berry, 1967), patterns of human migration (Kitayama & Bowman, 2010), and urbanization that results in increasing individualism and thus less conformity. Murray, Trudeau, and Schaller (2011) provided a unique explanation for cultural differences in conformity; they suggested that cultural differences may reflect the prevalence of disease-causing pathogens. Where pathogens were more prevalent, they suggested, cultural norms would promote greater conformity in order to combat infectious diseases.

#### Social Comparison

According to Festinger's (1954) theory of social comparison, people need stable, accurate appraisals of themselves, and in the absence of objective criteria judge themselves by comparison with others. Research has found that for individuals to obtain an accurate appraisal, they generally compare themselves with others who are similar on a particular attribute, such as attitudes or ability (Suls & Miller, 1977), emotions (Schachter, 1959), or personality traits (Thornton & Arrowood, 1966).

Peng, Nisbett, and Wong (1997) identified two cultural factors that can affect the choice of comparison others. First, collectivists are likely to choose comparison others from the same culture. Second, because cultures differ in which human traits are valued, individuals who feel themselves lacking in a culturally valued trait are unlikely to seek out social comparisons regarding that trait. For example, many Westerners tend to judge themselves positively unless their failure relative to others is obvious. When this happens, they tend to distance themselves from outperforming others. Lee, Oyserman, and Bond (2010) suggested that this could be due to mindset. For example, Chinese students rated themselves as better than others and distanced themselves from outperforming others when primed with an individualist mindset.

Not all social comparisons are done by choice. Louis and Cours (1999) found that when forced to make a comparison, non-Asians reported more favorable comparisons related to their personality and behavior than did Asians, who also reported that downward comparisons had a more unfavorable effect than did non-Asians.

The consequences of social comparison also show cultural differences. Heine et al. (2001) found that European North Americans who received failure feedback persisted *less* on a follow-up task than those who received success feedback. Consistent with a self-improvement motive, Japanese who received failure feedback persisted *more* on a follow-up task than those who received success feedback. White and Lehman (2005) also studied the role of social comparison in promoting self-improvement. In a study of Canadians, they found that Asian Canadians sought more upward social comparisons, and more social comparisons after failure, than did European Canadians, especially when the opportunity for self-improvement was made salient.

#### Risky Shift

In studies conducted in Western societies, participation in a group can influence members to endorse a course of action that is more extreme than they would have done if asked individually (Stoner, 1961). This finding of a risky shift has been frequently replicated and holds true for most decisions involving a degree of risk. Several theories have been proposed to account for this finding, including that of Wallach, Kogan, and Bern (1962), who proposed that risk taking occurs because of diffusion of responsibility. Collins and Guetzkow (1964) suggested that high risk takers are more confident and persuasive, while Bateson (1966) suggested that as people discuss an issue, they become more familiar and comfortable with it, and hence perceive less risk Finally, Brown (1965) noted that dilemmas reliably produce cautious shifts in risk-averse cultures, where caution is socially valued. This can be partly explained by a social comparison effect. Several studies have documented a non-risky or cautious shift phenomenon (Myers, Murdoch, & Smith, 1970; Vidmar, 1970), which leads to a culture-value explanation of choice shifts. Evidence in support of the culture-value explanation includes the work of Carlson and Davis (1971), who compared Chinese from Taiwan and a sample of Americans and found that the Chinese were more cautious than Americans in making decisions. They attributed the difference to the Confucian ethic, Chung Yung. Douglas and Wildavsky (1982) suggested that an individualistic social system (such as in the United States and Australia) values uncertainty because it provides challenges and opportunities, and hence results in more risk-taking. On the other hand, a hierarchical bureaucratic social orientation (such as those existing in South Korea and China) tends to prefer customary operating procedures and is therefore more riskaverse. In support of this hypothesis, Americans were found to recommend that others select a riskier option over a conservative alternative more often than did Chinese (Hong, 1978). Similarly, Kim and Park (2010) found that Australians expressed their opinions more favorably and confidently than South Koreans when making risky decisions.

#### **Social Influence Processes**

#### Reciprocity

As a real estate agent in Texas, Tyler's father frequently gave small gifts to past and future clients. In many cases the gift was a small kitchen knife with his logo on the side. By doing this he was unknowingly tapping into an influential process called *reciprocity*. There are many ways to conceptualize reciprocity, but Cialdini's (2001) definition focuses on its persuasive power. People often feel obliged to reciprocate

when they have received a favor. Therefore, the receiver of the favor is likely to acquiesce to a future request. However, culture can play a moderating role in this social influence process.

Underlying reciprocity is the idea of maintaining social relationships that might benefit you in the future. Collectivists are particularly keen on making sure social harmony is maintained within a group, and more likely to be affected by reciprocal processes (Orji, 2016). However, Orji (2016) found that, regardless of cultural orientation, the most powerful of Cialdini's six persuasive processes are reciprocity, liking, and commitment. Individualists are more likely to be persuaded by reciprocity than most other tactics, but this process was even more persuasive for collectivists.

The authors concluded that although these processes work regardless of cultural context, they likely do so because of different underlying motivations. Collectivists' motivation can be explained through their desire to maintain group harmony, and future group success due to their compliance to a persuasive process such as reciprocity. Individualists, on the other hand, are motivated by creating beneficial relationships that lead to more advantageous future interactions, and therefore are still affected by reciprocal processes (Orji, 2016).

Reciprocity is a strong influential process that taps into one of our basic needs for survival: our social connections. The influential power of reciprocity may differ in terms of our motivation to return a favor, but we all feel obligated to help someone who has helped us.

#### Social Proof

How do we know how to act in most situations? In many cases we can rely on social proof. Social proof is based on the actions of people around you (Cialdini, 2009), which might not always turn out for the best. Imagine the last time you were stuck in traffic because of a major wreck on the road. Maybe you saw one or two people decide to cross a dangerous grassy median to get off the main highway. After a few cars did this, you may have witnessed an increased number of cars willing to make this attempt as they saw others do it. People were more likely to take part in the illicit behavior, because social proof in this situation led people to think that the behavior was acceptable.

As might be expected, the more collectivist a person is, the more likely they will be influenced by social proof. Collectivists rely more on social cues to determine their identity. This leads to a greater reliance on the behavior of others in guiding their own behavior (Capozza, Voci, & Licciardello, 2000). For example, after being asked to volunteer to complete a short survey without being paid, collectivists were influenced to a greater extent when told to first consider how their peers had historically complied with such a request. Individualists were more likely to

comply when asked to first consider how they, themselves, had responded to such requests in the past (Cialdini et al., 1999).

Barrett et al. (2004) extended the social proof literature by varying the degree in which social proof was perceived. In a situation with a high degree of social proof, participants perceived that people always acted with a certain behavior, while in a situation with a low degree of social proof, others were perceived to rarely act in a certain way. A high degree of social proof was powerful in both American and Polish cultures, however, it had an even greater effect on Polish participants.

#### Scarcity

Cialdini (2001) defined scarcity as a persuasive technique that occurs when individuals place more value on short supply items due to an underlying belief that limited supplies foster uniqueness. Such items are often perceived as being of higher quality. This concept has largely been used in the business world as a persuasive tool that adds perceived value to company products (Lynn, 1991). Recent work has explored how the concept of scarcity functions in consumer cultures outside of Western countries.

When it comes to promoting product uniqueness, individualists are prone to gravitate toward items that will let them express their perceived individuality (Markus & Kitayama, 1991). Orji (2016) confirmed this while exploring the effects of persuasive strategies on individualists and collectivists. Individualists were more affected by the concept of scarcity than were collectivists. Wu, Lu, Wu, and Fu (2012) found that in Taiwan, a collectivist and high uncertainty avoidance culture, participants were also affected by the perceived sacrifice of not buying an item due to scarcity, but their perceptions of quality, expense, and overall value did not increase their intention to buy.

Uniqueness and value play an important role in understanding why scarcity may influence our decisions, but it is important to consider various cultural components that may mediate these effects. For example, individuals in low context cultures are more prone to be influenced by scarcity tactics than individuals in high context cultures. This is due to the direct nature of communication in low context cultures that promotes direct persuasive techniques such as presentations, demonstrations, or testimonials. High context cultures are more likely to use relationship building by creating a personal connection between individuals and the persuasive message (Jung & Kellaris, 2004). Furthermore, uncertainty avoidance, or the cultural drive to avoid risky and uncertain situations, is also differentially affected by scarcity. Individuals in high uncertainty cultures tended to be more likely to purchase a product when a message used scarcity. When it appears that a product will run out soon, those high in uncertainty avoidance attempt to reduce that prospect (Jung & Kellaris, 2004).

#### Cognitive Dissonance

Festinger's (1957) theory of cognitive dissonance suggests that we are motivated to hold consistent attitudes, beliefs, and behaviors and thus avoid dissonance. Although Festinger was convinced that the need to avoid cognitive dissonance is a basic human need, cross-cultural researchers have challenged the universality of cognitive dissonance. For example, after making a difficult decision, North Americans generally reduce dissonance by enhancing a chosen alternative and devaluing a rejected alternative, while East Asians do not show this pattern (Heine & Lehman, 1997a).

Markus and Kitayama (1991) suggested that individuals with interdependent self-construals place less importance on internal attributes (e.g., attitudes) as compared to external attributes (e.g., social roles). Thus, inconsistency between attitudes and behavior may be less significant for collectivists than it is for individualists.

While both individualists and collectivists experience cognitive dissonance, Hoshino-Browne, Zanna, Spencer, and Zanna (2005) found that cultural differences can shape the particular situations in which dissonance is aroused. They found that European Canadians showed significant post-decisional justification when they made choices for themselves, whereas Asian Canadians only engaged in post-decisional justification when they made choices for their friends.

The purpose of dissonance reduction can also vary across cultures. Kitayama, Snibbe, Markus, and Suzuki (2004) found that North Americans were motivated to reduce dissonance that affected their feelings of competence and efficacy, while Japanese participants were motivated to reduce dissonance when it was relevant to positive appraisal by others.

Other cultural factors can affect the experience of cognitive dissonance. Newburry and Yakinova (2006) found that individuals from high uncertainty avoidance, high power distance, and high context cultures prefer greater cognitive consistency, and Child and Moellering (2003) reported that cognitive dissonance is more likely among collectivists when decisions are made that are in conflict with the values or norms of the culture.

#### Self-Effacement

The effectiveness of social influence can depend on the extent to which an individual's culture promotes self-effacement vs. self-enhancement. The concept of self-effacement is rooted in the Confucian principle of propriety, which requires that individuals maintain a degree of humility that reflects their standing in society and promotes modesty. In contrast, Western culture promotes self-enhancement by encouraging individuals to define themselves as unique and separate individuals who are self-confident and responsible to themselves (Bond, 1991; Heine & Lehman, 1997b).

Thus, the process of social influence will be more effective to the extent that it incorporates these cultural preferences. For collectivists, a source or message that involves self-effacement often affirms the communicator's ties to the audience and will be viewed more positively if it follows normative restrictions on self-presentation (Kurman, 2003). While self-effacement may be an effective influence tactic when the target is the individual communicator, denigration of one's reference group is likely to backfire in collectivist cultures (Brown & Kobayashi, 2002).

#### In-group/Out-group Effects

Research on social influence and research on persuasion are interconnected (Turner, 1991) in that both use the elaboration likelihood model that outlines two approaches to attitude change: central and peripheral. McGarty, Haslam, Hutchinson, and Turner (1994) used this model to test the role of in-group and out-group associations on the persuasive effects of a message. What they found was counterintuitive. In-group association increased the central route used by participants. Thus, participants were more likely to listen closely to the in-group source and message, and not use broad peripheral cues as predicted. The process involves an interaction between the social context in which the message is received and individual cognitive processing. When the source of persuasion is part of an out-group, self-categorization by individuals in the audience can lead to reliance on peripheral cues that cause a pushback against the speaker's intended message (Mcgarty et al., 1994). From this perspective, culture can have a particular impact on the effectiveness of a persuasive argument depending on the in-group or out-group source of the message.

Social influence is influenced by the way in which different cultures perceive incoming information from a group member. In a study on the perception of insults, Bond et al. (1985) found that Chinese participants high in both collectivism and power distance were less critical of an insulter if they thought the insulter was of a higher status than their own. In contrast, Americans, who are generally lower in collectivism and power distance, held perceptions that were not differentially affected by the social status of the insulter. One explanation for this is that individualists tend to apply a universalistic standard to all people, whereas collectivists tend to be more particularistic and hold differentiated standards for in-group and out-group relationships (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988).

Out-group influences tend to be a bit more complex when it comes to cultural differences related to trust (see Gudykunst et al. (1992); Yukl, Maddux, Brewer, & Takemura, 2005; Zou et al., 2009). For example, Yukl et al. (2005) found that both Japanese and American participants trusted in-group members more than outgroup members. However, Japanese participants were more likely to be influenced by an out-group member if they perceived some sort of indirect personal link to

the out-group member. Self-categorization was more important to Americans in this context since the Japanese participants were more willing to accept someone from an out-group as long as they were linked indirectly. In most cases, individuals from the out-group are seen as less trustworthy and are less persuasive than in-group members. Although group membership plays an important role in how influential a message is, it is important to also consider how one's social status with the group can affect the effectiveness of social influence.

#### Status Hierarchy

Where we are on the social ladder of our culture has particular consequences when it comes to overall health and behavior (see Zink et al., 2008). The respect we receive, the perceived competence we are considered to have, and our influence on others are often connected to one's status in society. Our social identity is partly derived from our status, and cultural traditions often stratify and maintain such hierarchies (Grusky, 2007). Furthermore, neural underpinnings have been found linked to one's quick recognition of status differentials in social interactions that affect behavior (Wang, Kessels, & Hu, 2014). As previously discussed, power distance can make a difference in the effectiveness of a social influence attempt and status hierarchy can affect the success of social influence in similar ways. However, the dynamic interaction between the status of the influencer and the target of influence can be distinctly affected by cultural context.

Zitek and Tiedens (2012) found that even though Americans were more likely to demonize social hierarchies, they were more likely to implicitly appreciate the cognitive ease in recognizing such social hierarchies. Furthermore, they were more likely to remember and learn new information that was influenced by a hierarchical social structure. In a study on delayed discounting, Ishii, Eisen, and Hitokoto (2017) found that Americans were more likely to discount future (larger) monetary gains when their perception of their social status was low. This implies that although Americans do not like the idea of hierarchical stratification, they are unconsciously aware of the concept, which subsequently affects their behavior. Japanese participants in the same study were not influenced by priming their social status. Although social hierarchies are more salient in Japanese culture, their orientation toward long-term goals protects them from delayed discounting more than their American counterparts (Ishii et al., 2017).

The scope of our status and influence can sometimes be contingent on our personal qualities. For example, when we are striving for a promotion, there are many factors that relate to getting the job. However, one important factor that seems to stand out in different cultures is similarity to others (Schaubroeck & Lam, 2002). Culture moderates the importance of similarity. In individualistic cultures, those who have similar characteristics to their colleagues are seen as more influential, while in collectivist cultures, workers who are similar to their boss are more likely

to be seen as influential. In order to perpetuate company values in collectivist cultures, those going up for promotion are evaluated on a set of less flexible characteristics (Schaubroeck & Lam, 2002).

#### Resistance to Social Influence

Social influence is not always successful. Individuals sometimes resist influence attempts and researchers have identified several factors that can promote resistance, including prior public commitment to one's position, individual preference for consistency, and distance from the source of the influence (Gopinath & Nyer, 2009). Several strategies for resisting persuasion have been identified and include avoidance strategies; biased processing of information, including selective exposure; and counter-argument. Research on how culture may affect resistance to social influence suggests that an individual's reluctance to change is related to basic value dimensions, such as uncertainty avoidance or individualism/collectivism (Gudykunst, 1997). Thus, in order to maintain harmony and balance, collectivists are more likely to use avoidance or biased processing rather than counter-argument. For example, Yukl, Fu, and McDonald (2003) found that American and Swiss managers were more likely to use direct influence tactics such as rational persuasion and coalition building to resist social influence, while Chinese were more likely to use indirect tactics like upward appeals to authority.

One type of resistance to social influence is psychological reactance, which occurs when social pressures become so blatant that individuals think that their freedom to think or do what they want is threatened (Brehm, 1966). However, not everyone is equally sensitive to threats to their freedom. Individualists who value autonomy and independence are more likely to experience reactance (Dowd, Wallbrown, Sanders, & Yesenosky, 1994). Although psychological reactance can lead to attempts to restore freedom, it can also lead to attempts to reestablish a person's sense of self (Worchel, 2004). A person's sense of self is often interdependent in collectivist cultures, while it is often independent in individualistic cultures. This difference can affect the experience of psychological reactance. For example, Jonas et al. (2009) found that individuals from collectivistic cultures were less sensitive to a threat to their individual freedom but more sensitive if their collective freedom was threatened. Similarly, collectivists value the collective freedom of an in-group more than individualists do, whereas individualists are more protective of their individual freedom (Graupmann, Jonas, Meier, Hawelka, & Aichhorn, 2011). Another interesting cultural variation in reactance sensitivity can be seen in individuals who are bi-cultural. Bi-culturals can be self-conscious about their identity and as a result may experience reactance against cultural cues that imply how they should behave. Thus, self-consciousness can result in overcorrection, leading to behaviors that provide contrast effects. Similarly, individuals

who perceive their two cultural identities to be in opposition can experience inner conflict that can result in reactance against cultural expectations (Benet-Martínez & Haritatos, 2005).

#### Conclusion

Culture presents a unique perspective on understanding much of the social influence literature. As pointed out, research on attitude change, persuasion, and many other forms of social influence has typically focused on defining psychological constructs through a Western lens and a biased sample (e.g., college students). Introducing the variable of cultural context brings about a new set of problems for cross-cultural researchers. However, generalizing these findings has become a key effort taken on by cultural psychologists in recent decades (De Mooij & Hofstede, 2010).

When it comes to social influence, culture acts as a moderator between influence processes and message effectiveness. The source of the message can greatly affect the success of a persuasive message in any culture, but the salient cues individuals seek in a credible source can be modified by cultural orientation. How a message is conveyed is also an important aspect of communication. Consistency, emotional appeals, and nonverbal communication are all affected by our culture. In this chapter, we have addressed aspects of group dynamics that play a major role in influence. Although many observers once believed that collectivists were more conforming than individualists, this notion overlooked the variable of context, which questions the us-them mentality that formed the basis for some cultural research (Moghaddam et al., 1993). Influence processes like reciprocity and scarcity seem to be more universal in principle, but vary in the degree to which they are effective across cultures. Concepts like cognitive dissonance are better understood through our core cultural value systems than a universal paradigm. Finally, we explored the influence culture can have on our ability to counter and resist persuasive attempts. Culture is multifaceted, pervasive, and context-driven in most cases. The success of an influential message is dependent on the cultural context in which it is conveyed, received, and interpreted. It is important to understand that it is not simply an issue of cultural differences, but a complex moderation of processes that influence us all.

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# Cross-Cultural Differences and Similarities in Attribution

# Kristy K. Dean and Anne M. Koenig

Imagine you are visiting a museum while on vacation. A stranger suddenly rushes by you, not looking at any displays and bumping into people as they pass. Why do you think the stranger rushed out of the museum? Now imagine the reverse scenario—you have to rush through a museum while on vacation. Why did you rush? The answers to these questions are attributions. *Attributions* are inferences about the causes of events—why you or someone else acts the way they do (Heider, 1958). Did the stranger rush because he/she is uninterested in art? Because he/she is rude? Because the tour bus is about to leave? Because there is an emergency?

Attributions can be internal or external in nature (Heider, 1958). Internal attributions are dispositional causes for behavior, which place the cause of behavior in something about an individual (e.g., personality traits, attitudes, ability). In the example above, causes such as "he's rude" or "she's uninterested in art and culture" are internal attributions because they suggest something about the internal, dispositional state of the actor. External attributions are situational causes for behavior which place the cause of behavior in the environment (e.g., some feature of the current social situation, other group members, luck). Causes such as "he's late to meet his tour group" and "there is an emergency" are external attributions because they suggest something about the external situation. In this chapter we will discuss internal and external attributions with regard to several common biases people have when attributing the causes of others' behavior and our own behavior. We will also discuss evidence for cultural similarities and differences and explore why cultural differences exist. Finally, we will apply what is known about cultural differences in attribution to better understand group behavior and academic success across cultures.

As you will see, research studies on cultural differences in attribution are almost entirely based on comparisons between people from Eastern cultures (e.g., Japanese, Chinese, Koreans) and Western cultures (e.g., European Americans, European Canadians, Western Europeans). Referring to "Eastern cultures" and "Western cultures" is indeed a broad categorization that admittedly glosses over the traditions, languages, history, religious beliefs, and political systems that differ across and within the "East" and the "West." However, there is a great deal of theory and research that suggests Eastern cultures share similar cultural orientations which differ from the shared cultural orientations of Western cultures—to warrant such broad categorizations (e.g., Hofstede, 1980; Triandis, 1995). On the one hand, Western cultures support an individualistic worldview, which prioritizes personal concerns (e.g., individual rights, autonomy, distinctiveness from others) and a focus on the individual. On the other hand, Eastern cultures share a more collectivistic worldview, which prioritizes social concerns (e.g., familial duties and obligations, connectedness to others) and a focus on the social environment. Of course, there are also individual differences within cultures; someone from an Eastern culture could think, feel, and behave like someone from a Western culture, and vice versa. But living and participating in a particular culture inherently shapes a person's psychology, getting "inside our heads" to create different cognitive, affective, motivational, and behavioral patterns across these cultures (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). We will return to these cultural orientations later when discussing possible causes for cross-cultural differences in attributions.

# Attributions of Others' Behavior: The Correspondence Bias

When attributing the causes of others' behavior, a common bias is to explain behavior in terms of internal, dispositional attributes of the target, even when that person's behavior is constrained by external, situational factors (see Gilbert & Malone, 1995; Ross, 1977). This bias is called the *correspondence bias* or the fundamental attribution error (for a discussion of the distinction between these concepts, see Gawronski, 2004). There are two common paradigms in correspondence bias research. In the classic *attitude attribution paradigm*, Jones and Harris (1967) had participants read an essay either praising or derogating Fidel Castro, the then Prime Minister of Cuba, and then estimate the actual attitude of the essay writer. For some participants, this inference was a straightforward one, as the content of the writer's essay likely indicated their attitude as pro- or anti-Castro. But other participants were told the essay writer was *forced* to write a pro- or anti-essay—they had no choice in the matter. In this condition, the content of the essay may

not reflect the writer's actual attitude. Jones and Harris's results indicated, however, that American participants in both the choice and no-choice conditions rated writers of pro-Castro essays as more favorable toward Castro than writers of anti-Castro essays. That is, they attributed the content of the essay to the writer's disposition, despite the clear situational constraint.

A second paradigm that displays the correspondence bias is the *quiz role paradigm* (Ross, Amabile, & Steinmetz, 1977). In this paradigm, three participants unfamiliar with each other are randomly assigned to be the quizmaster, contestant, or observer in a quiz show game. The quizmaster creates several trivia questions, which the contestant attempts to answer (and gets several incorrect). Why does this paradigm show the correspondence bias? Observers rate the quizmaster as more intelligent than the contestant—an attribution that does not take into account the random assignment of roles. Quizmasters only *look* more intelligent because they get to write questions based on their own idiosyncratic knowledge, whereas contestants may likely not know the answers to such specific questions, making them look less intelligent. The correspondence bias occurs because observers make internal attributions about the intelligence of the quizmaster and contestant despite clear situational constraints (the random drawing of who gets which role).

#### Cultural Differences and Similarities in the Correspondence Bias

Do both Easterners and Westerners show the correspondence bias? Although the early cross-cultural studies indicated that Easterners show a weaker correspondence bias than Westerners (Lee, Hallahan, & Herzog, 1996; Miller, 1984; Morris & Peng, 1994), more recent research has shown that Easterners are also susceptible to the correspondence bias. Koreans, Japanese, and Chinese made similar dispositional attributions as Americans in the attitude attribution paradigm where participants make attributions for another's forced behavior (Choi & Nisbett, 1998; Kashima, Siegel, Tanaka, & Kashima, 1992; Krull et al., 1999; Masuda & Kitayama, 2004; see also van Boven, Kamada, & Gilovich, 1999). Chinese also show the same bias as Americans in the quiz show paradigm (Krull et al., 1999).

Although Easterners and Westerners show similar dispositional biases under the basic paradigms described above, there are situations in which Easterners reduce their bias. For one, East Asians show a weaker correspondence bias when social constraints are made salient. For example, when Korean participants were themselves forced to write an essay either supporting or opposing capital punishment, they more readily perceived the situational constraints inherent in this forced choice procedure and displayed a weaker correspondence bias when rating the attitudes of other essay writers (Choi & Nisbett, 1998). In addition, East Asians show less bias when the person's behavior is deemed non-diagnostic of internal

attitudes. For example, East Asians showed a reduced correspondence bias when the essay written under forced conditions was short and not persuasive, suggesting that the writer was not writing about his or her true attitude (Geeraert & Yzerbyt, 2007; Miyamoto & Kitayama, 2002), and when the essay was written by someone else and randomly selected for the actor to read (Masuda & Kitayama, 2004). American participants still showed the correspondence bias in all of these cases.

Similar to the concept of attributions, spontaneous inferences present an additional opportunity to examine cultural differences in attribution (e.g., Todd, Molden, Ham, & Vonk, 2011). After viewing an actor engage in some behavior ("she bought her partner a new sweater"), an individual may make a spontaneous trait inference, where they automatically infer internal attributes as causing the behavior ("she is generous"), or a spontaneous situation inference, where they automatically infer situational influences as causing the behavior ("the weather is cold"). The evidence demonstrates both cultural differences and similarities in these implicit attributions: Consistent with research on the correspondence bias, spontaneous trait inferences are stronger in magnitude in Western compared to Eastern cultures (Lee, Shimizu, Masuda, & Uleman, 2017; Na & Kitayama, 2011; Shimizu, Lee, & Uleman, 2017). However, spontaneous situation inferences occurred to the same degree across cultures (Lee et al., 2017).

Overall, these findings suggest that Easterners and Westerners both show the correspondence bias and a preference for internal attributions in some cases, but that when the situational constraints are salient or the behavior is non-diagnostic of their disposition, Easterners show a reduced bias (see also Norenzayan, Choi, & Nisbett, 1998). Importantly, this cultural difference in the use of internal attributions does not imply that one culture is more accurate than the other. The correspondence bias is called a "bias" because it represents an overemphasis on internal attributions; whether internal or external factors are the cause of the behavior is usually not known, and of course there can be multiple influences on behavior. Based on this logic, collectivistic cultures' acknowledgment of situational forces is not necessarily more accurate, but highlights a different way of thinking that more often takes the context into account.

# Explanations for Cultural Differences and Similarities in the Correspondence Bias

#### Examining the attribution process

Generally, the correspondence bias is assumed to result from a failure in the second step of a two-step process (see Gilbert, Pelham, & Krull, 1988; Krull, 1993). First, an internal, dispositional attribution is made automatically (i.e., effortlessly, spontaneously). This automatic attribution is then sometimes adjusted to account for external, situational causes of behavior within the second step of the process. This second step of correction is assumed to be an effortful process that takes

motivation and cognitive effort. Thus, if people are distracted, busy, or do not care, they will not correct their initial dispositional attribution for situational constraints and make the correspondence bias.

Consequently, one approach to understanding cross-cultural differences in the correspondence bias is to examine whether components of this attributional process differ across cultures. It is important to note at the onset of this discussion that the bias does not appear to result from a lack of knowledge about situational constraints on behavior. Indeed, Westerners *understand* that the situation can influence behavior, they just do not *apply* situational inferences to others' behavior as readily as Easterners (Gawronski, 2004). As you will see, although this approach of focusing on the attributional process has engendered some interesting and rigorous research, the evidence is quite mixed regarding this process across cultures.

First, sometimes the evidence has suggested that the first step of the process differs across cultures. For example, Easterners may be more likely to start the two-step attribution process with an automatic situational attribution (see Geeraert & Yzerbyt, 2007), especially when situational constraints are salient and they are motivated to focus on the situation (Briley & Aaker, 2006). Consistent with these findings, when Westerners are given the goal to learn about the situation, the correspondence bias is reduced (Krull, 1993). These findings suggest that possessing a situational goal—as is assumed of people from Eastern cultures—changes the first step of the process from an automatic dispositional attribution to an automatic situational one.

Second, some researchers argue the difference is in what occurs during the second step involving situational corrections. Some evidence suggests that situational correction is automatized for Easterners but not Westerners (Knowles, Morris, Chiu, & Hong, 2001), whereas other evidence demonstrates that situational corrections are still a controlled process that Easterners streamline by applying a generalized situationist heuristic, essentially a rule to always make situational corrections regardless of the specific information available (Lieberman, Jarcho, & Obayashi, 2005). Other researchers argue that the two-step attribution process is universal and cultural differences in the attribution outcome are instead caused by Easterners' deliberate consideration of different content during the judgment process, like prior knowledge of or experience with the target behavior (Jen & Lien, 2010).

Third, some research has suggested that we can understand cultural differences in attribution by focusing less on the order of attributional process and more on the experience of automaticity. The idea is that cognitive and neural indicators can provide clearer insight into whether different attributions are automatic for members of different cultures. For example, Shimizu et al. (2017) employed a process dissociation procedure to investigate cultural influences on spontaneous trait inferences and found that U.S. participants had a stronger automatic component to trait inferences than did Japanese participants. Similarly, Na and Kitayama (2011) found that European Americans responded with a strong event-related potential

N400 reaction—which reflects neural activity to unexpected or semantically inconsistent stimuli—when the words presented (e.g., "careless") were inconsistent with traits that were previously inferred via spontaneous trait inferences (e.g., "cautious"). However, Asian American participants did not show the N400 neural reaction to inconsistent trait words because they did not spontaneously infer traits in the first place. Other research evidenced greater neural activation in the left parietal cortex (LPC)—which indicates processing of spatial, contextual information—among Chinese (vs. American) participants engaged in a causal attribution task (Han, Mao, Qin, Friederici, & Ge, 2011). Although these studies do not speak to the attributional process per se, they do coalesce to suggest that internal and external attributions are relatively automatic for Westerners and Easterners, respectively (see also Mason & Morris, 2010).

#### Examining psychological mechanisms encouraged by one's culture

A different approach to understanding cultural differences in the correspondence bias is to examine the psychological mechanisms that underlie cultural differences. That is, why do people from Eastern cultures appear to notice and use situational constraints within this process more often than people from Western cultures? The general collectivistic and individualistic orientations have resulted in several specific differences in the psychological cognitive processes of Easterners and Westerners that influence the attributions individuals from each culture make to explain others' behavior (Norenzayan et al., 1998; see Choi, Nisbett, & Norenzayan, 1999).

First, differences in self-construals play a role in this cultural difference. Westerners tend to perceive themselves as autonomous and distinct from others, thus developing a stronger independent self-construal, whereas Easterners tend to perceive themselves as inherently socially connected to others, thus developing an interdependent self-construal (Markus & Kitayama, 1991). An independent selfconstrual that emphasizes the self as context-independent would encourage internal attributions, whereas an interdependent self-construal that emphasizes embeddedness within relationships and groups would encourage acknowledgment that others may influence behavior and, therefore, situational attributions. Experimental manipulations of self-construal demonstrate this effect; priming an interdependent self-construal within a German sample resulted in an attenuated correspondence bias when judging an essay writer's attitude when the essay was unpersuasive (Kühnen, Hannover, Pohlmann, & Roeder, 2013). This pattern mirrors the cross-cultural results of Miyamoto and Kitayama (2002), and demonstrates that self-construal is likely one driving force behind cross-cultural variation in the correspondence bias (but see Bauman & Skitka, 2010, who found that the correspondence bias was unrelated to measured self-construal in a representative American sample). In addition, priming a context-dependent sense of self reduced the correspondence bias in the quizmaster paradigm (Kühnen et al., 2013) and the cultural difference in spontaneous trait inferences was partially mediated by measured independent self-construal (Na & Kitayama, 2011).

Second, different lay beliefs about the world appear to affect attributions. Easterners tend to perceive dispositions as more "incremental" or flexible in nature, whereas Westerners tend to adopt an "entity" perspective whereby dispositions are perceived as relatively stable and uncontrollable (Dweck, Hong, & Chiu, 1993; Norenzayan et al., 1998). Because Easterners are more likely to hold incremental beliefs, they would be more wary of attributing people's behavior to dispositions, which they believe will change. In both U.S. and Hong Kong samples, lay theories were associated with dispositional inferences and in a U.S. sample, manipulating these lay theories demonstrated that thinking with an entity style leads to greater use of dispositional attributes compared to incremental style (Chiu, Hong, & Dweck, 1997; Poon & Koehler, 2006). Thus, there is support for the idea that these beliefs help to create cross-cultural differences in the correspondence bias.

There are also other explanatory factors that theoretically may play a role in these cultural differences. The first is thinking styles. Individualistic cultures encourage a more analytic view of the world, whereby objects are perceived as independent of their context and defined by their properties and attributes, whereas collectivistic cultures encourage a more holistic view where objects are closely bound to and shaped by the surrounding context (Nisbett, Peng, Choi, & Norenzayan, 2001). It therefore follows that an analytic thinking style will highlight an actor's dispositional traits and foster internal attributions, whereas a holistic thinking style will highlight the situational influences on an actor's behavior, thus fostering external attributions. Although this reasoning is intuitive and convincing, it lacks empirical support; thinking styles have not been measured as potential mediators or manipulated to examine their effect on attributions. One study examined individual differences in thinking styles within a Taiwanese population, but thinking styles did not result in different attributions (Jen & Lien, 2010).

A second explanatory factor is naive dialecticism, which is more common within collectivistic cultures, relative to logical determinism, which is more common within individualistic cultures (Peng & Nisbett, 1999). Naive dialecticism emphasizes change over time, tolerance of contradiction, and the interconnected nature of the world; logical determinism does not allow for contradiction and emphasizes logic and hypothetical reasoning. Because Easterners are more likely to believe that people can change and likely exhibit contradictory behaviors, and that context is connected to behaviors, an internal attribution is not a good representation of the cause of a behavior (Spencer-Rodgers, Williams, & Peng, 2012). This reasoning is similar to the perspectives on holistic thinking and incremental beliefs, but again has not been directly tested.

In sum, Easterners are less likely to attribute others' behaviors to internal dispositions, especially when situational constraints on others' behaviors are salient. This cultural difference in the correspondence bias may be due to different attributional processes, although the order of internal and external attributions

and the degree to which they are automatic vs. effortful is still being investigated. Cultural differences in the correspondence bias are likely the result of the psychological and cognitive orientations (e.g., interdependent vs. independent self-construal, incremental vs. entity beliefs about personality, holistic vs. analytic thinking styles, naïve dialecticism) that are more encouraged in collectivistic versus individualistic cultures, although evidence for the direct influence of these orientations on cultural differences is sparse.

#### Attributions for Our Behavior: The Self-Serving Bias

When identifying the causes of our own behavior, the main error we face is the *self-serving bias*—a tendency to explain our desired outcomes as caused by internal attributes (e.g., ability, effort) and our undesired outcomes as caused by situational factors (e.g., task difficulty, luck; Bradley, 1978; Miller & Ross, 1975). If you've ever credited a stellar exam grade to your diligent work ethic but dismissed a C or D as due to a tricky exam (or a mean professor!), then you are well-acquainted with the self-serving bias.

The self-serving bias is aptly named—it is a strategically motivated bias aimed at protecting or enhancing our sense of self-worth (Zuckerman, 1979). Attributing successes to our abilities reinforces the positivity of our personal strengths, whereas attributing failures to luck or situational circumstances shifts responsibility away from the self and toward an external source. The self-serving attributional bias is one of many self-enhancement strategies. (Readers interested in a comprehensive discussion of culture and self-enhancement should see, among other sources: Boucher, 2010; Brown, 2010; Heine & Hamamura, 2007; Heine, Lehman, Markus, & Kitayama, 1999; Sedikides, Gaertner, & Vevea, 2005.)

#### Cultural Differences and Similarities in Self-Serving Attributions

Do both Easterners and Westerners attribute their behaviors in a self-serving manner? Based on a review of 23 studies assessing the self-serving bias in Japan, Kitayama, Takagi, and Matsumoto (1995) concluded that the self-serving bias is relatively absent in Japan, and instead replaced by a self-critical bias, whereby successes are attributed to luck or effort (although effort is an internal attribution, it can change over time and in different situations) and failures are due to lack of ability. For instance, Japanese adults believed task feedback was a more accurate assessment of ability when the feedback was negative rather than positive (Heine et al., 2001), and Japanese elementary school students de-emphasized the role of ability when explaining successful outcomes (Yoshida, Kojo, & Kaku, 1982).

Similarly, stories in Japanese (vs. U.S.) elementary school textbooks more frequently convey external attributions for character successes and internal attributions for failures (Imada, 2012).

In stark contrast, a growing body of literature does display a self-serving bias among individuals from collectivistic cultures. College students from China, Japan, Korea, and Southeast Asia (Yan & Gaier, 1994) and Australian high school students who self-identified as Asian, Pacific Islander, and Maori (McClure et al., 2011) reported attributing their academic successes more to internal than external causes. Similarly, Japanese companies more frequently attributed corporate successes to internal causes and failures to external causes in their annual reports to shareholders (Hooghiemstra, 2008). Self-serving attributional biases have also been demonstrated by (a) Chinese adolescents explaining the causes for hypothetical events (Hu, Zhang, & Ran, 2016); (b) Japanese Olympic athletes explaining their wins and losses during competition (Aldridge & Islam, 2012); and (c) Japanese (Kudo & Numazaki, 2003) and Chinese (Brown, Cai, Oakes, & Deng, 2009) college students explaining the causes for their (ostensible) success and failure feedback on an experimental task of social sensitivity.

The research becomes even murkier when noting that inconsistencies in self-serving outcomes exist in the same national culture. For example, one study with East Indians demonstrated a self-critical bias (Fry & Ghosh, 1980), whereas another study with East Indians found evidence of a strong self-serving bias (Chandler, Shama, Wolf, & Planchard, 1981). There are even inconsistencies within studies; within the same Eastern samples researchers have demonstrated evidence of both self-serving and self-critical attributions (Kashima & Triandis, 1986), self-critical attributions paired with other self-enhancement strategies (Han, 2011; Muramoto, 2003), and self-serving attributions involving effort but not other internal influences (like ability and personality strengths; Hua & Tan, 2012; Kim & Park, 2003).

Taken altogether, the research sends a very mixed message regarding the universality of the self-serving attributional bias. Although Eastern cultures may encourage self-critical attributional tendencies, it appears that the desire to maintain a positive sense of self remains and is—sometimes at least—manifested in self-serving attributions for success and failure. A recent meta-analysis (Mezulis, Abramson, Hyde, & Hankin, 2004) confirmed that the self-serving bias is stronger in the U.S. and other Western countries than in Asian countries, but also finds variations within collectivistic cultures. Although Japanese and Pacific Islanders show little evidence for a self-serving bias, Indians display a moderately strong self-serving bias, and Chinese and Koreans appear just as self-serving in their attributions as Americans. Interestingly, Asian Americans and Hispanic Americans were found to make self-serving attributions to the same degree as European Americans, suggesting that the attributional patterns encouraged by one's culture of residence override those encouraged by one's ethnic culture.

# Explanations for Cultural Differences and Similarities in Self-Serving Attributions

Why do people from Eastern cultures sometimes display a weaker self-serving bias than people from Western cultures? The literature provides two explanations: (a) cultural differences in how the self is construed and evaluated; and (b) cultural differences in the importance of modest self-presentation. The premise for both explanations is that overarching cultural orientations toward individualism and collectivism encourage distinct psychological patterns (Kitayama et al., 1997), in this case cognitive and motivational patterns that influence how people react to their successes and failures.

Recall that independent self-construals are encouraged within individualistic, Western cultures whereas interdependent self-construals are encouraged within collectivistic, Eastern cultures (Markus & Kitayama, 1991). Several researchers have argued that the independent focus on personal distinctiveness is relatively more conducive to self-enhancement strategies like the self-serving bias than the interdependent focus on maintaining harmonious social connections (Boucher, 2010; Heine et al., 1999; Kitayama et al., 1997). Stated another way, standing out (or maintaining social harmony) is more readily achieved by highlighting the positivity of internal attributes (or external social influences) and downplaying the contributions of external social influences (or internal attributions). Although researchers frequently cite this rationale, studies rarely if ever measure or manipulate self-construals, and thus the causal role of self-construals is currently untested, at least in terms of the self-serving attributional bias. A recent study examining neurobiological markers for general self-interest motivation found that selfinterest was stronger among European Americans compared to Asian and Asian Americans, an effect that was mediated by interdependent self-construal (Kitayama & Park, 2014). Given this finding, future research could examine whether experimental manipulations of interdependent (vs. independent) selfconstrual will inhibit self-serving attributions more specifically.

A second explanation involves cultural differences in self-presentational strategies, or behaviors enacted to control how others evaluate the self (e.g., Baumeister, 1982). In an individualistic culture, a person may solicit positive evaluations from others by presenting the self as favorably as possible. A self-serving attributional pattern of taking credit for successes but not failures, therefore, seems a reasonable self-presentational strategy. Easterners also want to be perceived positively; however, they need to achieve this in a way that does not threaten social harmony. Indeed, studies across several East Asian cultures show that modest attributions for success are perceived more favorably than self-serving attributions (Bond, Leung, & Wan, 1982; Muramoto, Yamaguchi, & Kim, 2009; Yoshida et al., 1982). Interestingly, a study demonstrating the interconnection between conceptualizations of the self and self-presentational strategies shows that modest responding was judged as more socially acceptable among South Koreans with relatively stronger interdependent (vs. independent) self-construals (Kim, Kim, Kam, & Shin, 2003). These

findings suggest that in collectivistic cultures that emphasize social connection and harmony, presenting the self as modest is socially advantageous.

The self-presentational perspective has received modest support in the literature. In general, people from collectivistic cultures display less self-enhancement the more modesty is culturally encouraged (Kurman, 2003). By comparison, the self-serving attributional bias emerges within collectivistic cultures when modesty concerns are reduced, such as when attributions are anonymous, thus eliminating evaluative apprehension (Kudo & Numazaki, 2003), and when close friends and family are expected to make self-enhancing attributions on one's behalf (Muramoto, 2003). Indeed, a series of studies by Han (2011) suggested that modest selfpresentation can serve a self-enhancement function, at least within Chinese cultural contexts. Specifically, Han (2011) depicted a detailed social interaction script where the most socially appropriate behaviors were for an achiever to respond to an admirer's compliment with modest, external attributions, but for the admirer to react to this modesty by intensively reiterating their compliment. Importantly, this interaction pattern, when experimentally manipulated and compared to a more self-serving interaction, had a stronger positive effect on the achiever's self-esteem and was judged by both parties as maintaining the harmony within their relationship.

In sum, Easterners are sometimes less likely to show the self-serving bias and more likely to show a self-critical bias than Westerners. This cultural difference is likely the result of an interdependent (vs. independent) self-construal and the greater importance placed on modest self-presentation in collectivistic compared to individualistic cultures. Cultural similarities in the self-serving bias may also be due to self-construals and modest self-presentation, given that both can vary as a function of the situation (i.e., experimental manipulations).

# Applications of the Attribution Biases across Cultures

We now wish to turn attention to the implications of these biases for two social issues: group behavior and academic success. How do internal and external attributions, the correspondence bias, and the self-serving bias relate to group-level behavior and to success in academic domains and how do these implications vary across cultures?

## Attributions for Group Behavior

Both of the attribution biases discussed above assess attributions toward individual actors. Sometimes, however, we behave as members of a group or within a group. Collectivist and individualist worldviews suggest differences in the treatment of groups and group action. Collectivistic cultures emphasize groups: Easterners are

expected to forgo individual interests to maintain social harmony and fit in with the group (Hofstede, 1980; Triandis, 1995), they incorporate group memberships into their self-concepts (Markus & Kitayama, 1991), and they see groups as more cohesive (Spencer-Rodgers, Williams, Hamilton, Peng, & Wang, 2007). Thus, group memberships, and knowing who is in your group (the in-group) and who is not (the out-group), appear more important in collectivistic than individualistic cultures. In addition, collectivistic cultures emphasize the autonomy of social collectives and give groups more causal control of social outcomes, whereas individualistic cultures emphasize individual autonomy and give individuals causal control of social outcomes (Kashima et al., 2005; Menon, Morris, Chiu, & Hong, 1999; Morris, Menon, & Ames, 2001). Therefore, in collectivistic cultures, people more readily perceive groups as acting as a whole, rather than as individual members.

How does this differential focus on groups versus individuals as agents of action affect attributions across cultures? For one thing, Easterners show a greater correspondence bias when making attributions for *group* behavior than for individuals. For example, when given information about (a) an individual or a workgroup who had to make salary decisions in the workplace or (b) a fireman or group of firemen who had to rescue a girl from a burning building, Chinese participants were more likely than Americans to make external attributions about individuals (a weaker correspondence bias), but did not differ from Americans in external attributions about groups. In fact, the Chinese used more internal attributions for a group's action than an individual's, while Americans used more internal attributions for an individual's action than for a group's action (Menon et al., 1999; see also Chiu, Morris, Hong, & Menon, 2000; Friedman, Liu, Chen, & Chi, 2007; Morris & Peng, 1994). Thus, Easterners see groups as causal agents and make internal attributions for a *group's* behavior, even as they attribute an individual's actions to the situation.

A second implication of this focus on groups in collectivist cultures is in the group-serving bias, or the self-serving attributional bias at the group level. This bias can emerge as in-group favoritism—internal attributions for positive events by in-group members and external attributions for negative events by in-group members, or out-group derogation—internal attributions for negative events by out-group members and external attributions for positive events by out-group members. As with the self-serving bias, group-serving biases enhance self-esteem (Tajfel & Turner, 1986), which may indicate that, similar to the self-serving bias, Easterners would show reduced biases because self-enhancement is encouraged less in collectivistic cultures. However, because of Easterners' focus on groups, and their attempts to balance self-enhancement motives with modesty restrictions, Easterners may show an increased group-serving bias because it is more socially appropriate to enhance the self by enhancing group memberships. All that said, research on in-group favoritism and out-group derogation is mixed. Although some studies find in-group attributional bias in Western but not Eastern cultures (Heine & Lehman, 1997; Ma-Kellams, Spencer-Rodgers, & Peng, 2011; Snibbe,

Kitayama, Markus, & Suzuki, 2003), other studies do find the biases in Eastern cultures (Hewstone, Bond, & Wan, 1983; Taylor & Jaggi, 1974), and still others find the bias within some Eastern cultures (i.e., Japan) but not others (i.e., South Korea; Muramoto et al., 2009). There is some evidence to suggest that Easterners' lower in-group favoritism, when it does manifest, is due to dialectical thinking; when this was primed, both European American and Chinese participants made weaker in-group-favoring attributions compared to participants primed to think in a more linear manner (Ma-Kellams et al., 2011). More research will be required before making conclusions about the presence or absence of the group-serving bias in collectivistic cultures.

A third implication of this difference between individual and group agency is stereotyping. Stereotypes are beliefs about the characteristics of members of certain groups. Given East Asians' propensity to see groups as possessing agency and attributing groups' behavior to group dispositions, they may engage in more stereotyping. In fact, East Asians were found to stereotype fictional group members as well as members of national groups such as Kenyans, Chinese, and Americans, more than Americans (Spencer-Rodgers et al., 2007). Easterners are also more likely to assume that group members will act in accordance with group norms (i.e., actually behave in "stereotypical" ways), presumably because of cultural norms to maintain group harmony, because groups demand conformity, and because groups are readily included within the interdependent self-concept (Spencer-Rodgers et al., 2007). In addition, to the extent that groups are seen as cohesive, both Easterners and Westerners see them as more stereotypical (Spencer-Rodgers et al., 2007), but Easterners see groups as more cohesive than Westerners, which helps to account for differences in the amount of stereotyping in different cultures. Conversely, however, because Easterners are more likely to assume things will change and tolerate contradictions, they may see groups as changeable and acknowledge that individuals may be members of multiple categories, and therefore their stereotypes might be more likely to change and to include contradictory positive and negative elements (Williams & Spencer-Rodgers, 2010). In sum, because of the collectivistic tendency to see groups as cohesive and agentic, Easterners appear to be more likely to stereotype individuals based on group membership and attribute behavior to group membership, but may also be more open to change and contradiction in stereotypes.

# Attributions and Cultural Discrepancies in Academic Performance

East Asian students have been found to consistently outperform their American counterparts across a range of academic subjects and levels of education (e.g., Stevenson et al., 1990; Stevenson, Chen, & Lee, 1993). These discrepancies in academic achievement cannot be explained as due to national differences in the amount of time spent in school, the amount of money spent on education, or class

size (Stigler, Lee, Lucker, & Stevenson, 1982), especially considering that discrepancies also arise within the U.S. between Asian American and European American students (Chen & Stevenson, 1995). Attention has thus turned to psychological explanations, and to effort attributions for success and failure in particular.

East Asian cultures commonly emphasize scholarly effort as a means of doing well in education (and other domains), as evidenced by Confucian teachings and current cultural practices and experiences. For instance, Confucian and Asian proverbs often reinforce the ideas that effort elicits self-improvement (e.g., "Be not ashamed of mistakes and thus make them crimes") and yields positive outcomes (e.g., "Enough shovels of earth—a mountain. Enough pails of water—a river"). Japanese students are encouraged to engage in *hansei*, which involves reflecting on one's shortcomings (in this case, academic failures) so as to improve upon these in the future, and Japanese teachers praise *gambaru* (perseverance) and *gaman* (enduring hardships; Heine et al., 1999). Another perspective argues that, among Asian Americans in particular, the immigrant experience emphasizes the importance of academic effort as a means to achieve upward social mobility and thus economic stability (Xie & Goyette, 2003).

These cultural teachings and experiences mirror empirical research findings, which demonstrate cultural differences in effort attributions. Chinese and Japanese students attributed success to "studying hard" more so than Asian American students, who made this attribution more than European American students (Chen & Stevenson, 1995; Holloway, 1988). Similarly, Korean students reported greater pride in successes they attributed to perseverance and other effort-related actions (Kim & Park, 2003). Hong Kong Chinese students stated that effort is the most important contributor to academic success, career success, and being wealthy (Salili & Mak, 1988). Additionally, American mothers cited lack of ability as well as a lack of effort when their child underperformed academically, whereas Asian mothers cited lack of effort (Crystal & Stevenson, 1991; Hess, Chih-Mei, & McDevitt, 1987) and set higher academic standards in response to successes (Stevenson et al., 1990). These findings suggest that cultural differences in academic achievement may be due, in part, to Asian and Asian American students' (and parents') heightened emphasis on effort more than their European American counterparts.

This rationale, however, is dependent on the notion that effort attributions foster academic success. Theory and research both directly and indirectly provide support for this notion. Weiner conceptualized effort attributions as internal, but also as more unstable (susceptible to changes across time and situation) and controllable (amenable to volitional control) than ability (Weiner, 1986). Importantly, an unstable and controllable cause can be changed and improved in the future. Explaining success as due to one's ability may increase self-esteem (as suggested by the self-serving bias), but failure due to lack of ability leaves little room for improvement. In contrast, attributing successes to effort provides

assurance that similar performance in the future can be attained with similar effort, while attributing failures to lack of effort spurs self-improvement and eventual success via increased effort. Indeed, reinforcing the use of effort (vs. ability) attributions for failure experiences increased the time students devote to academically-based tasks (Heine et al., 2001), which ultimately results in improved performance (Dweck, 1975). Importantly, a longitudinal study following over 745 Asian American students from kindergarten through high school confirmed that emphasis on academic efforts explains the Asian-White achievement gap better than cognitive ability and sociodemographic factors (like family income; Hsin & Xie, 2014). In sum, the research coalesces to suggest that internal attributions are not created equal—effort, but not ability, attributions are more consistent with Eastern, collectivistic perspectives on academic self-improvement and appear to be closely associated with academic success within these cultural contexts.

#### **Future Directions and Conclusion**

The story of cross-cultural research in attribution should sound familiar by now: Research on attributional biases, such as the correspondence bias and the self-serving bias, started out using only Western samples. Given the myriad ways that collectivistic and individualistic cultures differently shape our psychology, psychologists hypothesized that attributional biases would be weaker or even absent in Eastern nations and many of the initial studies showed this to be the case. However, further examination has provided a more complete, if mixed, story. Easterners do show the correspondence bias and the self-serving bias just as strongly as Westerners in some circumstances, although in other circumstances these biases are reduced. A more precise definition of what circumstances create or reduce these biases is still being determined.

There are other attributional biases we did not discuss in this chapter because evidence is limited. For example, the actor-observer bias, which occurs at the intersection of attributions of the self and others, occurs when people attribute their own behavior to situational factors but the same behavior by others to dispositional factors (Jones & Nisbett, 1972). Research indicates that the bias may be lessened in collectivistic compared to individualistic cultures (Choi & Nisbett, 1998, Study 2), however, more research will be needed before making any conclusions.

In addition, researchers are employing more experimental paradigms to examine the individual-level psychological processes that drive general culture-level differences in attribution. This includes studies that prime self-construals (Kühnen et al., 2013), as well as research including bicultural individuals, who possess both individualistic and collectivistic mindsets and can easily shift between these when

primed with cultural cues (e.g., Hong, Morris, Chiu, & Benet-Martinez, 2000). This situated cognition approach (see Oyserman & Lee, 2008) has been gathering momentum in the broader cross-cultural literature, and its initial attempts to explain cultural influences on attribution are promising.

Finally, the implications of these cultural differences for many domains such as work life, the penal system, and close relationships have yet to be fully explored. How might effort attributions influence worker productivity, satisfaction, and turnover across cultures? How might cultural differences in the correspondence bias influence aspects of the legal system, such as punishments for those who break the law? How would the self-serving bias, or the actor-observer bias, extend to close family members and other loved ones in different cultures? We look forward to the research on cross-cultural similarities and differences in attribution that is yet to come.

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# The Importance of Attractiveness Across Cultures

# Stephanie L. Anderson

When Susan Boyle—a rather frumpy, middle-aged woman from Scotland—made her singing debut on the television program *Britain's Got Talent*, nobody expected such a lovely gift to be wrapped in such plain packaging: in fact, "[t]he eye-rolling public and the three jaded judges were waiting for her to squawk like a duck" (McManus, 2009, para. 4). However, when she began to sing, her voice stunned the audience and judges alike. (Ms. Boyle, whose story quickly generated international interest, went on to earn runner-up in the competition.) Why was Ms. Boyle's performance so surprising?

Despite reminders that one should never judge a book by its cover, research has documented the existence of a physical attractiveness stereotype (PAS), or the tendency to ascribe positive characteristics to attractive individuals. In addition to being perceived more favorably by others, studies indicate that good-looking people also experience better life outcomes, contrary to the notion that "beauty is only skin deep." Attractive adults receive more attention, positive social interaction, and help from others than do unattractive adults; in addition, they achieve greater occupational success, have more dating and sexual experience, are more popular, and—perhaps as a result of positive treatment—enjoy better physical and mental health (Gupta, Etcoff, & Jaeger, 2016; Hosada, Stone-Romero, & Coats, 2003; Langlois et al., 2000). In sum, attractiveness matters.

In this chapter, I first consider the extent to which conceptions of attractiveness vary as a function of sociocultural setting. I will then discuss research that has explained why beauty matters and the benefits that accrue to good-looking people. Finally, I will draw upon work that suggests the importance of attractiveness in everyday life is not just a natural, inevitable feature of human existence, but is instead a product of particular cultural worlds. Recent work in cultural psychology

has suggested that the importance of physical attractiveness in everyday life varies depending on the extent to which different cultures afford or require individual choice in the construction and maintenance of personal relationships (Adams, Anderson, & Adonu, 2004; Anderson, Adams, & Plaut, 2008; Plaut, Adams, & Anderson, 2009). I will contrast two ways of understanding the nature of relationship construction—voluntaristic-independent and embedded-interdependent—and describe research that examines the importance of beauty across cultures to determine implications for the role of physical attractiveness in everyday life.

#### **Physical Attractiveness**

Physical attractiveness is a highly sought-after quality in mainstream, contemporary American settings. People spend a great deal of time and money trying to improve their appearance, from rigorous diet and exercise programs to elaborate grooming practices. Some people even choose to permanently alter their looks through cosmetic surgery. Certainly, individuals may be motivated to engage in these activities for reasons other than appearance (e.g., to be more healthy), but the pursuit of physical attractiveness is probably not far from anyone's mind. What are the qualities that comprise physical attractiveness? And, is everyone who seeks beauty looking for the same thing?

People generally agree about who is and is not physically attractive, both within and across cultural and ethnic groups (Cunningham, Roberts, Barbee, Druen, & Wu, 1995; Zebrowitz, Montepare, & Lee, 1993), with a particular emphasis on female beauty (Gottschall et al., 2008). This suggests the existence of some universal standards by which beauty is measured. Indeed, research has identified attributes that are commonly considered attractive. For instance, female faces that possess expressive (e.g., dilated pupils, high eyebrows, and large smiles with a full lower lip), neonate (e.g., large eyes and a small nose), and sexually mature characteristics (e.g., prominent cheekbones, a narrow face and thin cheeks, and a small chin) are judged more attractive by participants from varied cultural backgrounds (Cunningham et al., 1995). Features associated with fertility (e.g., youthfulness, small waist-to-hip ratio (WHR) in women) and health (e.g., facial averageness and symmetry) are broadly recognized as indicators of physical attractiveness, as well. These traits translate into reproductive success and are thus vital for sexual selection and the transmission of one's genes into future generations (see Berry, 2000, for a thorough review on this topic).

Some aspects of what is considered beautiful do seem to vary across time and place, however. This is especially true for malleable characteristics of appearance (e.g., body ornamentation and scarification). For example, body weight and shape ideals in the West are markedly different now than they were in the past. An evaluation of *Playboy* centerfold models and Miss America Pageant contestants

throughout the 1960s and 1970s revealed evidence of a gradual shift away from more voluptuous figures toward a thin, "tubular" body shape (Garner, Garfinkel, Schwartz, & Thompson, 1980). Research has confirmed this trend toward more slender centerfolds into the 1980s and 1990s, as well (Sypeck et al., 2006). The International Body Project, which surveyed individuals in 10 major world regions, demonstrated variation in reports of ideal female body weight as well as body dissatisfaction, significantly associated with exposure to Western media; of note, the largest effects emerged when comparing rural and urban sites within countries (Swami et al., 2010). Additional evidence for this emerges within the U.S. Ethnic differences between European American, African American, and Asian American men and women exist for eating behaviors and attitudes and body dissatisfaction, with European American participants reporting more disordered eating and dieting behaviors and attitudes and greater body dissatisfaction than either African American or Asian American people (Akan & Grilo, 1995). This finding suggests that ethnic differences in desired body type exist too, leading European Americans to strive toward a thinner ideal. Indeed, when asked to rank female silhouettes of varying size, European American men preferred thinner figures than did African American men (Greenberg & LaPorte, 1996). Thus, even though many of the characteristics that constitute beauty hold universal appeal, some attractive qualities are culture specific.

## The Benefits of Beauty

## "Beautiful Is Good": The Physical Attractiveness Stereotype

Much of the research examining the benefits of attractiveness has emerged from a stereotyping perspective. Numerous studies have documented physical attractiveness stereotyping (PAS), or a tendency to evaluate physically attractive people more positively than physically unattractive people, especially for traits associated with social skills (Eagly, Ashmore, Makhijani, & Longo, 1991; Feingold, 1992; Langlois et al., 2000). In a seminal study evaluating PAS, researchers presented undergraduate students with photographs of relatively attractive, average, and unattractive male and female faces (Dion, Berscheid, & Walster, 1972). The participants evaluated the stimulus photos on several personality traits (e.g., sociability, trustworthiness) and also indicated the likelihood of the targets experiencing happiness or success in various life domains (e.g., marriage, occupation). Participants judged attractive targets more positively on a composite measure of socially desirable personality traits; in addition, they also expected the attractive targets to experience more positive life outcomes (e.g., obtain more prestigious jobs, have better marriages, and lead more satisfying social and professional lives) than their less attractive peers, leading the researchers to dub PAS the "what is

beautiful is good" effect. This tendency has been replicated for ratings of children (e.g., Dion, 1973), and even infants (e.g., Stephan & Langlois, 1984).

PAS effects are also evident in entertainment media. A random sample of popular American films across five decades revealed a beauty bias such that films in the sample portrayed attractive characters more positively than unattractive characters in terms of both moral goodness and subsequent happiness, regardless of production decade or character sex (Smith, McIntosh, & Bazzini, 1999). Moreover, merely viewing a film that portrayed attractive characters more positively increased the tendency of participants in a subsequent experiment to ascribe positive characteristics to attractive targets. This study demonstrated the existence of PAS in cultural representations; moreover, results suggest that the strength of such effects can vary with exposure to different representations.

#### Cultural Variation in the PAS

Some researchers have suggested that PAS effects might reflect sociocultural factors (see Dion, 1986). If physical attractiveness serves as a heuristic cue about a target's defining essence, then one can expect the tendency to ascribe positive attributes to attractive individuals to be stronger in settings that promote a focus on personal characteristics as the essence of identity (i.e., settings associated with individualism). In this context, attractiveness serves as a cue that a target's essential nature is good, a cue that extends to judgments about other traits. In contrast, the tendency to stereotype on the basis of attractiveness may be weaker in settings that promote a focus on ascribed social locations (e.g., roles, family connection, and group identities) as the essence of identity (i.e., settings associated with collectivism). In this context, attractiveness may provide little information about the target's essential nature, leading perceivers to ignore this (irrelevant) information when making judgments about other traits.

To test this idea, researchers examined the role of physical attractiveness in judgments of traits and life outcomes among samples of Chinese Canadian participants who varied in involvement with the local Chinese community and cultural life (Dion, Pak, & Dion, 1990). Highly involved participants (who presumably had greater exposure to collectivism) demonstrated less physical attractiveness stereotyping than did participants who were not as involved in their context. This was especially true for ratings of traits that reflected social morality (e.g., *kind* and *considerate*). Participants in both groups did show evidence of PAS effects on items concerning desirable life outcomes (e.g., *a happy life*), however.

An alternative account of cultural variation maintains that the tendency to ascribe positive characteristics to attractive people occurs to an equal extent across settings, but the traits that people consider valuable and therefore associate with physical attractiveness vary. Because people value different traits in different settings, the particular dimensions on which one will observe PAS effects will vary

depending on context; in other words, "what is beautiful is *culturally* good." To test this idea, researchers exposed Korean participants to photos of Korean targets of varying attractiveness and asked them to judge the targets on traits reflecting domains of value in North American settings (e.g., *potency*) and Korean settings (e.g., *integrity* and *concern for others*; Wheeler & Kim, 1997). Korean participants did not show effects of physical attractiveness on ratings of *potency* (an American-valued trait), as North American participants do, but did show effects for *integrity* and *concern for others* (Korean-valued traits), as North American participants do not (Eagly et al., 1991; Feingold, 1992), thus leading the researchers to conclude that physical attractiveness stereotyping for judgments about traits is universal, but the particular traits on which stereotyping will occur are culturally specific (cf. Chen, Shaffer, & Wu, 1997; Shaffer, Crepaz, & Sun, 2000).

Work by my colleagues and myself may help shed some light on these differing accounts (Anderson et al., 2008). We exposed Ghanaian and American participants to photos of Black and White faces and asked them to judge the targets on Ghanaian-valued (e.g., sensitive, modest) and American-valued (e.g., genuine, spontaneous) traits. (These traits were derived from a pretest among an independent sample of Ghanaian and American students.) Consistent with PAS research, American participants rated attractive targets more positively than unattractive targets. This was especially true for American-valued traits, providing support for both the "what is beautiful is good" and the "what is beautiful is culturally good" versions of PAS.

In contrast, there was no evidence that Ghanaian participants rated attractive targets more positively than unattractive targets, even for Ghanaian-valued traits. These results are inconsistent with the "what is beautiful is *culturally* good" effect (Wheeler & Kim, 1997), perhaps reflecting differences in research settings (i.e., East Asian and West African worlds). However, results for Ghanaian participants do align with the previously described research demonstrating cultural variation in the influence of attractiveness on judgments about traits (Dion et al., 1990). Dion et al.'s (1990) assessment of cultural engagement resonates closely with our comparison of settings that varied in the extent to which implicit cultural patterns afford an experience of relationship as something embedded in the structure of everyday worlds. This suggests that future researchers may likewise observe small or non-existent PAS effects, even for culturally valued traits, when they conceptualize culture in terms of engagement with everyday worlds.

# A Cultural Perspective on Attraction

Contrary to popular understanding, the point of a cultural perspective is not simply to demonstrate that phenomena vary across cultures; instead, the goal is to illuminate a process that is typically invisible in mainstream accounts: the extent to which psychological phenomena are not "just natural," but reflect particular

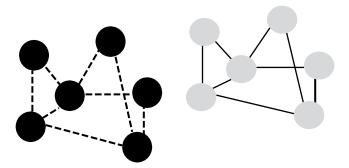


Figure 29.1 Voluntaristic-independent and embedded-interdependent constructions of self and relationship reality. *Note*: The left side of the diagram represents *voluntaristic-independent* constructions of self and relationship. These constructions locate psychological experience in the internal properties of individuals (represented by solid circles) and relationship (represented by dashed lines) as a relatively tenuous, secondary product of ontologically prior selves. They promote a thin, frictionless experience of relationship—characterized by relative freedom of entry and exit—as the unstable product of choice. The right side of the diagram represents *embedded-interdependent* constructions of self and relationship. These constructions locate psychological experience in fields of relational connection (represented by solid lines) that are ontologically prior to the individual experience (represented by shaded circles). They promote a thick, sticky experience of relationship—characterized by more constraints on entry and exit—as an environmentally afforded fact. Source: Adams et al. (2004). Adapted with permission.

constructions of reality. In other words, an emphasis on physical attractiveness and the resulting benefits of beauty that are extensively documented by social psychologists are not a reflection of the default condition of humankind. Rather, the process of attraction takes on special significance precisely because of the specific characteristics of the social and cultural environment in which it has been studied.

Previous research has framed attractiveness as a stereotyping phenomenon and has investigated its effects on trait ratings. In contrast, our research frames attractiveness as a relationship phenomenon and considers its implications for life outcomes. From this perspective, the importance of physical attractiveness depends upon the particular constructions of reality—voluntaristic-independent or embedded-interdependent—that inform relationship experience (see Figure 29.1). In the next section, I will elaborate on the theoretical framework that informs our research.

#### Theoretical Framework: Construction of Self and Relationship

Human beings are intensely social creatures; in fact, some researchers have even claimed we have a fundamental need to belong (Baumeister & Leary, 1995). And, although virtually everyone on the planet can identify at least a handful of meaningful interpersonal relationships, our implicit understandings about

relationship—specifically, how connections are formed and perhaps even the value we place on different forms of relationality—are not necessarily shared across time and space. Based on Markus and Kitayama's (1991) distinction between independent and interdependent selves, my colleagues and I have elaborated a theory that differentiates between two ways of explaining connection—voluntaristic-independent and embedded-interdependent constructions of relationship—that differ primarily in the affordance of choice in relationship construction (Adams et al., 2004; Anderson et al., 2008) (see Figure 29.1).

In mainstream, contemporary American settings, as well as other Western societies (e.g., Canada, Western Europe), *voluntaristic-independent* constructions of relationship prevail. In these settings, the self is viewed as an inherently separate entity, a unique being set apart from other persons and the social context at large. Thoughts, feelings, and actions originate from the internal properties of independent actors as expressions of individuality (Markus & Kitayama, 1991). When the self is construed as independent, relationship is framed as secondary in the sense that it must be voluntarily created: autonomous actors are free—and even compelled—to forge and dissolve connections with others (Adams et al., 2004; Anderson et al., 2008).

In many non-Western cultures (e.g., East Asia, Latin America, West Africa), *embedded-interdependent* constructions of relationship are prominent. In these settings, ideas about the self emphasize inherent connection. The individual exists in relation to other persons and the social context. A desire for appropriate action within one's proper role, which in turn satisfies individual desires, provides motivation for behavior and cognition (Markus & Kitayama, 1991). When the self is construed as interdependent, relationship is framed as primary in the sense that the larger social network exists even apart from the individual: connection is inescapable. Rather than an emphasis on contracting relationships based on personal choice, these settings emphasize management of connections in densely interconnected networks associated with situations of limited mobility (Adams et al., 2004; Anderson et al., 2008).

These terms—voluntaristic-independence and embedded-interdependence—refer to implicit understandings about the nature of connection, but they are more than mere ideas; the essence of these concepts is built into the structural realities of our everyday lives. For example, in settings where the self is construed as independent and relationship as voluntaristic-independent, normative behavior includes leaving home in young adulthood, living independently for a period of time, and marrying a partner of one's choice; in contrast, living with extended family from birth until death and entering into arranged marriages are commonplace practices in settings where the self is construed as interdependent and relationship as embedded-interdependent (Adams et al., 2004). To further illustrate this point, let us consider two of the research settings from which our work arises: North American and West African worlds.

Voluntaristic-independent constructions of relationship are inscribed in several patterns of mainstream American worlds. The notion of relationship as the product of personal choice figures prominently in linguistic practices. Despite the well-documented influence of environmental factors (e.g., propinquity) on relationship experience, lay people talk about making friends, and researchers study mate selection and friendship choice. The popularity of social networking websites (e.g., Facebook), which allow users to "link" to relationship partners, and online dating services (e.g., match.com and eHarmony.com), which allow users to browse photographs and biographies for hundreds of potential mates, provides further evidence that relationship is one of many domains in mainstream American worlds where abundant opportunities for choice figure prominently in daily life. In contexts that privilege choice as a fundamental feature of human agency—where choice is valued, where many opportunities for choice exist, and where choice affects liking—selection of a relationship partner is essential to self-determination and personal expression (Iyengar & Lepper, 2002; Kim & Sherman, 2007; Snibbe & Markus, 2005).

Associated with embedded-interdependent constructions of relationship, the de-emphasis on personal choice in relationship experience is evident in many West African worlds. Perhaps the most important pattern is the centrality of kinship, manifest in such practices as arranged marriage, but this de-emphasis on choice extends to other forms of relationship. For instance, "friendship" in these settings suggests more constricting, less voluntary connections than are common in North American experience (see Carrier, 1999; Wierzbicka, 1997). Contrary to stereotypes about sociable collectivists, people in West African settings tend to report fewer friends and are more likely to claim enemies than people in North American settings (Adams, 2005; Adams & Plaut, 2003). People in North American settings report a large number of friends and few enemies in part because local constructions of relationship afford them freedom of choice both to create positive connections and to avoid negative connections. In contrast, people in West African settings report fewer friends and frequently report that they are the target of malicious enemies, in part because local constructions of relationship afford less choice or agency either to create positive connection or to avoid negative connection (Adams, 2005; Adams & Plaut, 2003).

### Implications for Attraction

The study of attraction is one area in which divergent constructions of relationship have notable implications for psychological understanding. A cursory reading of the social psychological literature suggests that interpersonal attraction seems as natural and normal to human behavior as eating or sleeping. Attraction certainly seems to be a process of great consequence (just ask any undergraduate!).

However, much of the weight interpersonal attraction assumes—in the scientific literature and in Western culture at large—is due to the aforementioned implicit understandings about the nature of self and relationship reality, specifically voluntaristic-independent constructions that are prominent in most of the settings where psychological research is conducted: mainstream, contemporary American university campuses in large cities across the U.S.

If (as in the case of embedded-interdependent constructions of relationship) social networks exist apart from the individual self, making connection the product of environmental affordance, the process of attraction is rendered somewhat meaningless. After all, if one has little choice in his or her relationship ties, beauty does not have much of an opportunity to matter. Attraction and the qualities that might make one a more desirable relationship partner, such as physical attractiveness—assume greater value when (as in the case of voluntaristic-independent constructions of relationship) the self is perceived as inherently separate from context and connection is framed as the product of choice. To the extent that people experience relationship as a discretionary product based on personal preference, personal preference (as a determinant of choice) and attraction (as a basis of preference) are important determinants in relationship formation (Rosenblatt & Cozby, 1972). Likewise, attractive attributes like beauty loom large. In such instances, physical attractiveness becomes an important commodity on the market of interpersonal relationship. People who possess attractive attributes (such as physical beauty) will be in higher demand and are better able to contract satisfying connections (Sangrador & Yela, 2000). In this way, voluntaristic-independent constructions of relationship promote the expectation that attractive people will have more satisfying lives than unattractive people.

#### Our Research

In the remainder of the chapter, I will discuss three studies that test the idea that the association between attractiveness and life outcomes varies across cultural worlds. In particular, I propose that attraction is especially important for life outcomes in worlds that promote constructions of relationship as the product of personal choice. To the extent that people experience relationship as an agentic creation and expression of personal preferences, attraction, and other bases of preference, loom large in relationship life. However, attraction may be less relevant in worlds that promote constructions of relationship as environmental affordance. To the extent that people experience less agency in the construction of relationship, attraction and other bases of personal preference have less impact on life outcomes.

### Attractiveness and Actual Outcomes: A Cross-National Comparison

In our first study on this topic, we focused on actual life outcomes, investigating the relation between participants' satisfaction with their own life outcomes and judges' ratings of participants' attractiveness (Anderson et al., 2008). This study included a cross-national comparison between students at two North American universities (settings in which voluntaristic-independent constructions of relationship are prominent) and a West African university in the country of Ghana (where more embedded-interdependent constructions of relationship prevail). In addition, we included a comparison of relationship contexts. To the extent that friendship is the prototypical "chosen" relationship (Palisi & Ransford, 1987) and kinship is the prototypical "given" relationship, cross-national differences in the attractivenessoutcome relationship should be greater for the former than the latter. As mating relationship entails an intermediate degree of choice—specifically, it allows more personal discretion than kinship, but is more exclusive and therefore provides less opportunity for choice than friendship—we expected cross-national differences in the association between attractiveness and outcomes for mating relationship to be somewhere in between differences for friendship and kinship.

Participants first rated their satisfaction with various life outcomes (e.g., *I am satisfied with my achievements*, *I am happy overall*, *Other people like me*). In addition to the overall measure of general life outcomes, we also included measures of outcomes (*practical support*, *emotional support*, *quality*, *closeness/intimacy*) within three relationship types—friend, mating, and kin relationship. Finally, we took a head-and-shouldersphotograph of each participant, which a separate sample of opposite-sex, same-nationality students later rated for attractiveness (Anderson et al., 2008).

We predicted that the positive association between attractiveness and life outcomes would be stronger or more evident in contexts characterized by constructions of relationship as the product of personal choice (i.e., in American settings and friendship, the prototypical "chosen" relationship) than the product of environmental affordance (i.e., in Ghanaian settings and kinship, the prototypical "given" relationship). Results provided support for our hypothesis for both general life outcomes and particular relationship contexts. For the measure of general life outcomes, the relation between attractiveness and life outcomes was positive among American participants but negative among Ghanaian participants. Although attractive Americans reported more positive outcomes than unattractive Americans, the reverse pattern was true of Ghanaian participants. For the measure of particular relationship contexts, results revealed no association between attractiveness and relationship outcomes in either the non-voluntary context of kinship or the semi-voluntary context of mating relationship. In contrast, results did reveal a positive association between attractiveness and outcomes in the voluntary context of friendship, but only among participants in American settings (Anderson et al., 2008).

# Attractiveness and Expected Outcomes: A Cross-National, Cross-Cultural, and Experimental Comparison

In our second study, we focused on judgments about the life outcomes of others, similar to much of the existing PAS research (Anderson et al., 2008). This study again included a cross-national comparison between students at a North American university and a West African university in the country of Ghana. We also included a cross-cultural comparison between students from urban and rural backgrounds. Extending research that examines differences in agency and relationship as a function of region (e.g., Markus, Ryff, Curhan, & Palmersheim, 2004; Plaut, Markus, & Lachman, 2002; Vandello & Cohen, 1999), we hypothesized that urban and rural settings differ in the extent to which they afford the experience of relationship as a product of choice. Urban settings typically foster greater relative social mobility (due to fewer constraints), anonymity, and a larger pool of potential interaction partners. This promotes a "free market" of relationship, in which personal choice and the qualities, such as attractiveness, that influence choice—can become important determinants of relationship outcomes. In contrast, the structure of life in rural settings—limited social and geographic mobility (due to greater constraints) and a circumscribed pool of potential interaction partners with whom one may have substantial duties or obligations (e.g., kin)—provides less opportunity for choice in relationship (Beggs, Haines, & Hurlbert, 1996). In these settings, attractiveness effects may be less evident as there is relatively little opportunity (or necessity) for personal preferences or qualities that constitute attractiveness to influence relationship outcomes. In addition to the cross-national and crosscultural comparisons, we introduced an experimental manipulation of relationship constructions (Anderson et al., 2008).

Participants first described either their three most meaningful personal characteristics (to influence them to experience themselves as a decontextualized bundle of traits; voluntaristic-independent condition) or their three most meaningful personal relationships (to influence them to experience themselves as embedded in connection with others; embedded-interdependent condition). They then received photos of Black and White, male and female, attractive and unattractive faces. Participants rated the likelihood of each target experiencing various life outcomes (e.g., be liked by others, have monetary success, get what he/she wants in life) (Anderson et al., 2008).

We predicted that the divergence in expected outcomes of attractive and unattractive targets would be greater in settings associated with voluntaristic-independent constructions of relationship as discretionary product (i.e., among American participants, urban participants, and participants in the voluntaristic-independent condition) than in settings associated with embedded-interdependent constructions of relationship as environmental affordance (i.e., among Ghanaian participants, rural participants, and participants in the embedded-interdependent condition). Results provided support for our hypothesis along all three dimensions

of variation in relationship construction. Attractiveness effects (i.e., the discrepancy between expected life outcomes of attractive and unattractive targets) were greater for American participants than for Ghanaian participants, for urban participants than for rural participants, and (though only among Ghanaian participants) for participants in the voluntaristic-independent condition than for participants in the embedded-interdependent condition (Anderson et al., 2008).

#### Attractiveness and Actual Outcomes: A Cross-Cultural Comparison

In our third study, we focused again on actual life outcomes, investigating the relation between attractiveness, social connectedness, and well-being (Plaut et al., 2009). This study included a cross-cultural comparison between residents of urban settings (in which voluntaristic-independent constructions of relationship are prominent) and rural settings (where more embedded-interdependent constructions of relationship prevail).

We analyzed data from the National Survey of Midlife Development in the United States (MIDUS; MacArthur Research Network on Successful Midlife Development). Participants included female respondents who indicated rural or city residence. Based upon research suggesting WHR as an indicator of female attractiveness (Streeter & McBurney, 2003), we used this variable as our measure of physical attractiveness. Our composite measure of well-being included participants' responses to items concerning life satisfaction, positive affect, self-acceptance, and environmental mastery. Our composite measure of social connectedness included participants' responses to items concerning contact with friends, social integration, support from friends, and strain from friends. We controlled all analyses for age, household income, and marital status, as well as body mass index (Plaut et al., 2009).

We predicted that the positive association between attractiveness and well-being would be stronger or more evident in contexts characterized by constructions of relationship as the product of personal choice (i.e., urban settings) than the product of environmental affordance (i.e., rural settings). More specifically, we hypothesized that the positive relation between attractiveness (low WHR) and well-being would be present in urban settings but absent in rural settings because attractiveness (low WHR) is also associated with better social connectedness in urban settings but not rural settings. Results confirmed our hypothesis. The relation between WHR and well-being was negative among urban, but not rural, participants. The relation between WHR and social connectedness was also negative among urban, but not rural, participants. More importantly, we observed support for our guiding hypothesis in the form of mediated moderation, such that social connectedness mediated the moderating effect of urban vs. rural background on the relation between WHR and well-being. In other words, attractive individuals in urban settings experience better relationships which—at least in part—contribute to their greater well-being (Plaut et al., 2009).

#### Conclusion

Together, results of these studies provide strong and consistent support that the well-documented association of attractiveness with positive life outcomes is not simply a natural or inevitable pattern, but rather a reflection of the particular cultural worlds—specifically, sociocultural settings (such as North American and urban worlds) that promote voluntaristic-independent constructions of relationship as the product of personal choice—in which much of the existing research has been conducted. Despite its importance in psychological theory and research, attractiveness appears to be less relevant in sociocultural settings (such as West African and rural worlds) that promote embedded-interdependent constructions of relationship as the product of environmental affordance.

In conclusion, our goal is not simply to document cross-national or cross-cultural differences, although that is a worthwhile pursuit; instead, we aim to provide an explanation for the status quo. The point of a cultural approach is to reveal how a phenomenon, like attraction, is grounded in particular constructions of reality—in this case, contemporary, mainstream North American worlds in which relationship is constructed in terms of personal choice. Our research illuminates the cultural grounding of personal relationship, a process that is typically overlooked. A comprehensive understanding of human behavior and cognition benefits through greater attention to this process not only when describing "others," but especially in the more typical case of mainstream research (conducted among North American undergraduates)—in which this process tends to remain invisible.

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# Multicultural Identity Development Theory and Research

# Richard L. Miller and Tyler Collette

Growing up in an independent, coherent, and stable culture has become less typical than it once was. In today's world, adolescents come of age in a more multicultural world than the one that their parents and grandparents experienced, and that world continues to evolve over the lifespan. During the course of our lives, we increasingly know and interact with people from several worlds, including the world that revolves around our family, the world of education, the world of work, and the world created by our culture(s). Our experiences in each of these several worlds influence our understanding of who we are and form the basis of our identity. As a result of globalization, assimilation, cross-cultural marriages, and immigration, we live in an increasingly interconnected world. The process of globalization alone, which includes the expansion of mass tourism, creation of multinational corporations, the emergence of multi-lateral governmental and non-governmental agencies, as well as the unprecedented availability of multicultural, media-based ideas, has changed the processes by which individuals form a sense of identity.

This chapter reviews the process of identity formation, especially the formation of a cultural identity; describes several factors that promote the developmental of a multicultural identity in today's world; and examines the positive and negative consequences of forming a multicultural identity.

## **Theories of Identity Formation**

How do we form a sense of who we are? Harry Stack Sullivan (1953) suggested that interactions with significant others were the primary source of a person's identity, while Hartman, in his book, *Ego Psychology* (1939), noted that a sense of identity prepares individuals for adaptation to both the biological and social environment.

Eric Erikson (1966, 1982, 1987, 1993) was one of the earliest and most influential theorists to examine the process of identity formation. He conceptualized the process of achieving a stable identity as the most critical task of adolescence and suggested that individuals experience an identity crisis during adolescence. He further proposed that the successful resolution of this crisis is dependent upon the extent to which individuals balance the various self-images they experience with the social roles that are available to them. The importance of cultural context is an integral part of the theory, for it is the balance between aspects of the individual and their cultural context that leads to the resolution of the identity crisis. Erikson (1966, 1993) made the point that an individual's culture provides people with an appropriate range of social roles from which to select who they will become and also a process by which they can validate their identity by providing a means for recognizing themselves in their chosen role. Similarly, in their book, Lives Across Cultures, Gardner and Kosmitzki (2008) pointed out that successful resolution of a crisis at any stage of development will depend on how the culture views the crisis and the chosen resolution.

Erikson also suggested that situational changes such as immigration to a new country could cause an imbalance between the person and the cultural context in which they formed their identity. In his book, *Insight and Responsibility* (1966), Erikson suggested that those with strong identities are not likely to experience a renewed identity crisis, but noted that even those with a strong sense of who they are will still respond to changes in cultural context.

Expanding on Erikson's ideas, Marcia (1966, 2002) suggested that the process of identity development is not limited to adolescence but continues throughout the lifespan as one's cultural context may change and develop. According to Marcia, a person's identity is influenced by personality, maturity, and cultural context. Marcia's Identity Status Model (1966) proposed that identity is a result of two processes: exploration and commitment, which can result in one of four possible identity statuses: *identity diffusion*, which occurs when there is a low level of exploration of identity options and little commitment to a particular identity role; *identity foreclosure*, which occurs when individuals demonstrate a low level of exploration of what roles are available in their situation but demonstrate a high level of commitment to the role they may have prematurely chosen; and *identity moratorium*, which occurs when there is a high level of exploration with a low level of commitment. Going to college is a good example of this. Marcia's fourth

process is *identity achievement*, which combines a high level of exploration and a high level of commitment. Individuals with a strong sense of who they are (i.e., identity achievement) tend to be happier and healthier than those whose identity is diffused, foreclosed, or not yet fully formed.

#### **Cultural Identity**

What is a cultural identity? According to Richard Shweder and his colleagues (1998), cultural identity involves adopting the cultural worldview and behavioral practices that unite individuals within a community. The cultural worldview includes our conception of human nature, the relationship of the individual to society, and moral and religious values. Worldview beliefs are transmitted from generation to generation through everyday practices such as work, play, and meals, as well as culturally relevant rites of passage, including school graduation, marriage, and childbearing. Cultural identity includes a wide range of beliefs and practices and includes the key areas that Erikson (1966) considered central to formation of a person's identity.

Erikson was not the only theorist to discuss the importance of cultural context in identity formation. Several researchers have noted the influence of contextual factors that are both immediate (one's present situation) and broad (the historical milieu) on the formation and experience of one's identity (Sellers, 1998). For example, if you are the only Hispanic person in a room of African Americans, you may become extremely aware of race, and that awareness will in turn affect your behavior and how you think of yourself. How situations can cause aspects of our identity to become more accessible has been demonstrated in several studies in which individuals were reminded of their cultural identity (e.g., Benet-Martínez, Leu, Lee, & Morris, 2002; Hong, Morris, Chui, & Benet-Martínez, 2000).

James Côté's (1997) Personality and Social Structure Perspective Model (PSSP) suggests that identity is a function of three factors: personality, interaction, and social structure. At the level of personality, an individual's identity formation is affected by self-perception and cognitive structure. Interaction refers to patterns of behavior that bring the individual into contact with family, friends, and the community. The social structure includes the prescribed roles available to the individual as well as the political, social, and economic conditions in their society. According to Côté, successful identity formation is more likely when individuals possess several elements of identity capital, which includes the financial, academic, human, social, linguistic, and cultural resources readily available to the individual.

Other theories suggest that membership in a cultural group or groups will influence how individuals define themselves. Among these are social identity theory

(Tajfel, 1981; Tajfel & Turner, 1986) and self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Turner, Oakes, Haslam, & McGarty, 1994). These theories suggest that as membership in a cultural group becomes salient, individuals model their social beliefs and behavior on those they perceive to be prototypical of the group.

Finally Arnett (2002) has suggested that as a result of globalization, many adolescents develop a "local identity" based on their indigenous tradition, and a "global identity" based on their exposure to a separate culture conveyed through media, as the availability of electronic media increases.

#### Individualism and Collectivism

Cultural differences in how we understand ourselves in relationship to other people have received considerable attention from cross-cultural researchers. In cross-cultural research, the term self-construal is often used instead of identity. A self-construal is the awareness of our thoughts and feelings that provide an understanding of our private inner self: The theory of divergent self-construals (Markus & Kitayama, 1991) attempted to expand upon the limited Western view of the self held by many contemporary researchers. Drawing upon research delineating cross-cultural differences in the views of personhood, Markus and Kitayama (1991) proposed that self-construals could be divided into two distinct conceptual representations of the self: independent and interdependent. Although some aspects of the self may be universal, they asserted that the fundamental nature of the self-construal is inextricably bound to the culture in which the individual was reared. Independent self-construals are, according to Markus and Kitayama (1991), generally representative of individuals in Western cultures, while individuals in non-Western cultures are more likely to possess interdependent self-construals. Culturally shared assumptions about the relationship of the individual to others the degree of separation or connectedness between individuals as perceived by people in a particular society—influence the view of self that characterizes an individual.

Markus and Kitayama (1991) and Singelis (1994) provided definitions of independent and interdependent self-construals. People of the Western world (e.g., the United States) generally subscribe to strongly individualistic beliefs, emphasizing the uniqueness of every individual and encouraging development of an independent self-construal. The independent self-construal views the self as an autonomous entity whose own thoughts, feelings, and actions are of utmost importance. Other people are important largely as a basis for social comparison, and the realization of internal attributes and accomplishment of personal goals is viewed as a highly desirable state.

In contrast, many cultures categorized as non-Western (e.g., China) are characterized as collectivist, focusing on the inherent connectedness of the individual to others. The interdependent construal of self is derived from this belief, viewing the self as an integral part of the social relationships in which one is engaged, and recognizing that thoughts, feelings, and actions are directly related to those of others with whom the person interacts. Relationships with others are integral to self-definition, as is the ability to maintain harmony in such social relationships (by engaging in appropriate actions, filling proper roles, and promoting the goals and needs of the group/others). In one representative study, Parkes, Schneider, and Bochner (1999) administered the Twenty Statements Test (Kuhn & McPartland, 1954) to participants from nationalities classified as either individualist or collectivist (based upon Hofstede's Individualism Index, 1980). Their results clearly indicated that individualists are more likely to employ autonomous self-descriptions (referring to their own internal attributes), while collectivists are more likely to describe themselves with social references (referring to group membership or to other people).

Markus and Kitayama (1991) posited that these divergent views of the self-maintain a crucial role in the organization of one's self-regulatory schemata and the interpretation of one's experiences, leading to a variety of consequences. One's self-construal can affect cognitive, emotional, and motivational processes. Likewise, the self is also a product of the social experiences to which it is exposed, especially those of culture, which provides a continually evolving and dynamic presence (Cross & Madson, 1997).

The independent and interdependent self-construals are closely related to the cultural syndromes of individualism and collectivism (Triandis, 1995). In fact, Triandis (1995) pointed out that Markus and Kitayama's (1991) use of the terms independent and interdependent construal of self is more or less equivalent to the social patterns that he labels individualism and collectivism. According to Triandis (1996), a cultural syndrome can be defined as the following:

A pattern of shared attitudes, beliefs, categorizations, *self-definitions*, norms, role definitions, and values that is organized around a theme that can be identified among those who speak a particular language, during a specific historic period, and in a definable geographic region. (p. 408)

Within a culture, variation exists in the extent to which one extreme of a cultural syndrome (in this case, individualism or collectivism) is emphasized above the other, but most members of a specific culture will tend toward the same view. In an individualistic culture, the definition of self is independent of the group; in a collectivistic culture, the definition of self is tied to the in-group. Triandis (1995) suggested additional attributes of individualism and collectivism that are helpful in clarifying the distinction between cultures that promote independent and interdependent self-construals. Individualists promote personal goals, while

collectivists give priority to in-group goals. Individualists rely more heavily upon attitudes as determinants of social behavior rather than norms, which are a key influence upon collectivists' social behaviors. Individualists maintain relationships that are personally advantageous and eliminate those that are costly to the individual, but collectivists will often maintain individually taxing relationships if they are beneficial to the in-group. Triandis (1996) also identified factors that promote either individualism or collectivism within a particular culture. Heterogeneous societies that have a large number of role definitions but relatively fewer norms (complex and loose) promote individualism; homogeneous societies with fewer role definitions and a large number of norms foster the development of collectivism. Climato-economic environment has also been shown to be a predictor of collectivism. For example, lower-income Chinese provinces, in both hotter and colder environments, were more likely to hold stronger interpersonal self-construals than Chinese individuals with similar income who lived in more temperate climates (van de Vliert, Yang, Wang, & Ren, 2013). High social class, migration, social mobility, and exposure to mass media also contribute to individualism.

## **Sources of Multicultural Identity**

Although the concepts of individualism and collectivism have received widespread attention, Hermans and Kempen (1998) have pointed out that in today's world, individuals are influenced by a much broader range of social processes than they were previously, and that cultural dichotomies suggesting we can categorize countries as individualist or collectivist are less useful than they once were for understanding identity formation. When Margaret Mead (1928/1961) wrote *Coming of Age in Samoa*, she described a situation where a single cultural tradition led to "one girl's life being so much like another's" (p. 11). Growing up in a single cultural tradition is becoming more and more unusual today. In fact, in today's global world, it is more common for individuals to internalize more than one culture, speak more than one language, live in a multicultural community and have ties to individuals whose nationality is different from their own.

As immigration increases, disseminations become worldwide, cross-cultural marriages become more common, multinational corporations flourish, international travel and tourism blossom, and people interact with diverse others more than ever (Friedman, 2000; Giddens, 2000; Hermans & Kempen, 1998). Thus, adolescents now come of age in a multicultural world where the process of creating a cultural identity has become more complex and often confusing, especially when in the process of accommodating different cultural values various socialization agents conflict with one another, for example, traditional parents and parents as seen on television.

#### Globalization

Globalization is an ongoing process of interaction and integration among the people and institutions of different nations. This process affects the environment, social, and political systems, economic development, and human well-being in societies around the world. In recent years, international business, migration, and information technology have, in the words of journalist Thomas Friedman, made globalization go "farther, faster, cheaper and deeper."

Thus, globalization tends to "deterritorialize" the range of social influences on identity development and to diminish the significance of socio-geographical location in regulating the flow of cultural experiences (Garcia Canclini, 1995; Tomlinson, 1999). Many formerly traditional cultures have become much more multi-varied and complex in recent years (Brown, Larson, & Saraswathi, 2002), including India (Jensen, 1998), Japan (Naito & Gielen, 2002), Nepal (Liechty, 1995), and the Inuit (Condon, 1988),

Adolescent identity formation may be particularly affected by globalization in that adolescents tend to be significant consumers of popular/social media, including television, movies, music, and the Internet, all of which accelerate the speed to which ideas spread from culture to culture (Dasen, 2000; Schlegel, 2001).

Although some theorists have expressed their concern that globalization will destroy localities and produce people who are homogenized and uniform, others have suggested that globalization removes the traditional anchoring of attitudes, beliefs, and behavior from their particular localities (Tomlinson, 2003). The latter view suggests that globalization is likely to promote the development of a multicultural identity that incorporates a broader based worldview.

#### Cross-Cultural Marriages

As cultural boundaries become increasingly more flexible in today's world, the number of intercultural marriages and the children of such unions have increased (Schuh, 2006). Rather than being instructed in the cultural expectations of one particular culture, children of these cross-cultural marriages are often exposed to aspects of both cultures. When parents are of two distinctly different cultures—for example, one culture emphasizing an independent self-construal and one culture promoting an interdependent view of the self—children are likely to receive conflicting points of view. Matsumoto (2000) contended that under such circumstances, children develop multicultural identities, resulting in the existence of multiple psycho-cultural systems of representations in the minds of such individuals. Children of mixed marriages will incorporate this multicultural identity in one of three ways when developing a sense of self. Children of such marriages could draw upon aspects of both cultures, using a mixture of independent and

interdependent self-construals in which neither culture is represented in a robust manner. Alternatively, children may develop a strong sense of identification to both cultures, providing an exemplar of each. Another possibility is that children with multicultural identities will develop a sense of self that depends upon the context. These individuals may be encouraged to use aspects of either an independent or an interdependent self-construal, depending upon the social or cultural situation. Oyserman (1993) suggested the final possibility, documenting the existence of both individualistic and collectivistic tendencies in response to differing aspects of the self among Arab and Israeli Jewish students in Israel, an area that, while traditionally considered collectivist, has been exposed to individualistic beliefs throughout its history of contact with cultures of the Western world. Oyserman (1993) asserted that individualism and collectivism are both culturally and situationally based.

If individuals with multicultural identities do indeed develop both independent and interdependent self-construals, which are then used differently based upon the situation, priming for one or the other should result in a shift in self-construal consistent with the prime. Garder, Gabriel, and Lee (1999) found that such a shift does occur. They presented European Americans with both independent and interdependent primes. Primes consist of stimuli that influence responses to later stimuli. For example, an individual could be primed with the word table and then asked the meaning of the word chair. In that situation, they are unlikely to think of the chair of a committee and more likely to think of a kitchen chair. In the Gardner et al. study, the participants who were primed with interdependence described themselves with a relatively greater proportion of interdependent statements than did those who were primed with independence. In addition, the participants primed with interdependence also made value endorsements and social judgments that were consistent with interdependent self-construals. The researchers also found that the greatest shift in value endorsements occurred when participants were given a prime that contrasted with that encouraged by their own cultural context.

#### Immigration

Adolescent immigrants may change their beliefs and values more than adults. For example, Nguyen and Williams (1989) found that the values of adolescent Vietnamese immigrants to the United States varied with length of time in the United States, whereas their parents' values did not. This can lead to dissonant acculturation during which adolescents are quicker to adapt to a new culture than are their parents (Portes, 1997).

Because identity formation is a prime challenge for adolescents, children and adolescents who immigrate to a new country are likely to face some difficulty in integrating the culture of their parents and the culture of their new home.

The degree to which this is a challenge is somewhat dependent on the age of the immigrant. Mena, Padilla, and Maldonado (1987) found that children under the age of 12 experienced less acculturative stress than did university students who had immigrated to the United States. Several factors may play a role in this difference, including the relative ease with which younger children acquire a second language.

Another important factor in the adjustment process is the type of support and assistance they receive from their primary caretakers while they make the transition to the new culture, as well as the peer and institutional supports in place to assist the newcomers. While peers and the educational system play an important role in transmitting the beliefs and values of the new culture, parents may continue to maintain the cultural practices of their home country. The socialization process for immigrants may also contain a role reversal when children provide their parents with information about the ways of the new country (Morales & Hanson, 2005). While the parents may benefit from learning what the children have discovered, it is often a burden for children to serve as cultural and linguistic brokers while still being socialized by their parents. For parents, the situation can be difficult, as they may have to surrender too much power to their children in coming to understand the ways of the new culture (Umana-Taylor & Fine, 2004; Weisskirch & Alatorre Alva, 2002). Finally, the degree to which the community in which a child lives accepts him or her as "one of their own" can have considerable effect on the child's psychological well-being and ability to achieve a stable multicultural identity.

Cross (1995) created a model that can be applied to the experience immigrants go through in developing a new identity. The model consists of four stages: pre-encounter, encounter, immersion/emersion, and internalization. In the pre-encounter stage individuals think of the world in terms defined by their cultural heritage. In the encounter stage, individuals experience attitudes, beliefs, and behaviors that are remarkably different from those to which they are accustomed. In the immersion/emersion stage, individuals often react to the culture shock of the encounter stage by idealizing the old ways. In the internalization stage they are able to embrace the best of what was and the best of what is new.

# Forming a Multicultural Identity: Gains and Losses

While a multicultural identity can provide feelings of pride, uniqueness, and a rich and varied sense of community and history, it can also lead to role confusion, values clashes, and competing cultural expectations. LaFromboise, Coleman, and Gerton (1993) described five models that can be used to illustrate different processes by which an individual may acquire a multicultural identity. They are assimilation, acculturation, alternation, multiculturalism, and fusion.

Assimilation occurs when an individual living in a multicultural society attempts to fully embrace the culture that is perceived to be dominant. It often requires "culture shedding": the unlearning or rejection of aspects of the culture of one's parents. For example, Fordham (1988) found that academically successful African-American students felt the need to reject the values of the African-American community in order to achieve their academic goals. According to the assimilation model, an individual in transition between two cultures will feel isolated and alienated until accepted by the new chosen culture (Sung, 1985). In addition, the loss of support from the old culture and the initial inability to use assets of the new culture are likely to lead to social problems, academic underachievement, and anxiety-related disorders (Pasquali, 1985). According to Kerchoff and McCormick (1955), marginalization, leading to low self-esteem, poor social relationships and negative emotional states, are more likely to occur when the individual's goal is assimilation but the barriers are manifest.

Acculturation occurs when an individual wants to become a fully competent member of the majority culture, but is still identified as a member of the minority culture. Such individuals may be considered to be bicultural and will often engage in a process called frame switching. Frame switching is a process by which individuals switch between two cultural orientations in response to cues from the environment. Bicultural individuals vary in their degree of bicultural identity integration. Those with a high degree of integration see their two cultural frames as complementary and compatible. According to Benet-Martínez and Haritatos (2005), individuals with a high degree of integration have better mainstream language proficiency, stronger mainstream cultural identity, and exhibit less anxiety and depression than those whose degree of integration is low. In addition, individuals with a high degree of bicultural integration are more responsive to cultural primes in ways that demonstrate a greater awareness of cultural context, while those who are low in bicultural integration are more likely to react to cultural primes in ways that demonstrate a reversal or contrast effect—exhibiting behavior that is opposite to the cultural prime (Benet-Martínez et al., 2002).

Alternation suggests that individuals may come to know and understand their original culture and the new culture and can then alter their behavior in ways appropriate to a given situation (Ogbu & Matute-Bianchi, 1986). Rashid (1984) suggested that this process allowed African Americans to function effectively within core American institutions while maintaining a sense of ethnic and cultural identity. He found that individuals who could effectively engage in alternation exhibited higher cognitive functioning and better mental health. A study by Sodowsky and Carey (1988) provided an example of the alternation model. They found that first-generation Indians who reported a high degree of proficiency in speaking English still preferred to think in an Indian language and that many preferred to eat Indian food and wear Indian clothing at home, but to eat American food and wear American dress when going out.

The multicultural model suggests that individuals can maintain a distinct and positive identity within the context of working and living in a multicultural society. Berry and his colleagues (Berry, 1984; Berry, Kim, Power, Young, & Bujaki, 1989; Berry, Poortinga, Segall, & Dasen, 1992) have argued that individuals who live in plural societies must face two challenges: how to maintain one's culture of origin and how to engage in intergroup contact. They have suggested that multicultural integration allows the individual to engage in the activities of one culture while maintaining identity and relationships in another. What makes integration possible in their model is the assumption that both the original and the new culture are tied together in a single social structure. Support for this type of integration comes from a study by Kelly (1971), who found that Native Americans in Tucson could occupy social roles in the local Native American community that were equal in status to those they occupied in the overall Tucson social structure.

Fusion suggests that cultures evolve and change as a result of multicultural influences and that a culture that shares social, political, economic, and geographic space will ultimately become a "melting pot." Gleason (1979) proposed that cultural pluralism would ultimately produce fusion. Unique to this process is the idea that both majority and minority cultures have an influence on the creation of the new culture. Support for this idea comes from studies by Weatherford (1988), who chronicled the influence that Native American culture has had on the social, political, economic and, cultural practices of non-Native Americans. In the fusion process, a multicultural identity is one that includes aspects of many contributing cultures. Thus, the answer to the question "Who am I?" becomes a composite derived from multiple influences transmitted through a variety of socialization processes and embraced by a host of individuals. How easy or difficult this process is depends on many factors. One factor is the degree of cultural distance between the cultures to which the individual has been exposed. Condon's (1988) research on Inuit adolescents' adjustment to becoming Canadian demonstrated that the greater the cultural distance between two cultures, the greater the psychological and social problems.

#### Life in a Multicultural World

Ramirez (1999) coined the term multicultural personality to describe individuals who are able to function well in a multicultural society. His research focused on immigrants who successfully integrated aspects of their original worldview with the worldview prevalent in their new country. Other researchers have studied individuals who have developed a multicultural identity as expatriates working in international businesses (van der Zee & van Oudenhoven (2000), as well as individuals who have responded to the increasing multiculturalism of their own country (Ponterotto, Costa, & Werner-Lin, 2002). In characterizing the multicultural

 Table 30.1
 Factors that contribute to multicultural identity development

Model	Characteristics
Racial/ethnic identity (higher levels)	Connectedness to the individual's racial/ethnic heritage; openness to people of other cultural groups; cognitive flexibility; willingness to interact across cultures and a commitment to social justice for individuals from all cultural backgrounds
Coping with cultural diversity (balanced bicultural integration)	Ability to balance multiple roles; bicultural and multicultural interaction and coping skills
Tolerant personality	Empathic skills with a broad spectrum of people; self-aware, introspective, and self-analytic; cognitively sophisticated; sense of humor
Universal-diverse orientation	Appreciative of similarities and differences between self and others; sense of connectedness and shared experience with all people
Expansion of gender roles	Transcends multiple roles, thus enhancing social support and interpersonal anchoring; increased self-complexity; enhanced empathy skills
Collectivist values and mental health	Collectivist and spiritual essence to human interaction and self-growth
Expatriate multicultural personality	Empathic, open-minded, emotionally stable, action-oriented, adventurous, curious

Source: Adapted with permission from Ponterotto, Utsey, & Pedersen (2006). Copyright © 2006 by SAGE Publications.

personality, Ponterotto and colleagues have incorporated several theoretical perspectives that describe the components of a person with a strong multicultural identity. Table 30.1 summarizes these components. As can be seen in Table 30.1, a robust multicultural or bicultural identity is based on a strong sense of personal identity, emotional stability, the ability to engage in self-reflection and to empathize with others, cognitive flexibility, and a sense of connectedness to others.

Bicultural individuals are individuals who have adopted two cultural identities to the degree that both cultural systems are considered definitions of one's identity. Biculturals are defined by two internalized identities that alternate, directing their cognition and behavior (Hong et al., 2000). By embracing two arrays of behavioral influences, with the added ability to switch between both cultures norms and values, strong bicultural identities can serve to double an individual's support system (Hong et al., 2000). To quantitatively measure this phenomenon, Benet-Martínez and Haritatos (2005) developed a scale to measure the extent to which individuals identify comfortably with both of their cultural identities; the bicultural identity integration scale (BII). Those scoring high on the BII tend to have a more developed mastery of both cultural identities. As a result, those who

score high on the BII become more responsive to culturally relevant cues or primes (Huynh, Nguyen, & Benet-Martínez, 2011).

In addition to being more responsive to culturally relevant cues, research has found additional benefits to a strong bicultural identity. This may be because individuals who are comfortable with both identities do not see the identities as in opposition to one another (Benet-Martínez & Haritatos, 2005). Cheng, Sanchez-Burks, and Lee (2008) found that Asian Americans were able to come up with more creative and extensive solutions to problems when allowed to use strategies from both cultural systems rather than only one. Their findings suggest that there is a psychological management of bicultural identity that may be related to the availability of multiple ways of knowing, which in turn influences how solutions to a problem are conceptualized cognitively (Cheng et al., 2008). Furthermore, Mok and Morris (2010) found that a bicultural identity may protect individuals from succumbing to psychological pitfalls such as groupthink when either cultural group is presented with faulty information that would lead to incorrect answers to subsequent problems. Bicultural individuals can take advantage of more creative possible solutions, because of an ability to contrast incoming information with either cultural identity. In this respect, bicultural identities protect individuals from the problems associated with group-related thought processes that maintain group harmony but might not be truly beneficial to the group (Mok & Morris, 2010).

Recent research on bicultural identities has tapped into the myriad benefits qualitatively observed over the past few decades (Nguyen & Benet-Martínez, 2013). Dorner, Orellana, and Li-Grining (2007) found a strong relation between "language brokering," or children who translate English for their parents, and standardized test scores. Language brokering then provides a mechanism for children to better characterize themselves with a strong bicultural identity. A meta-analysis on bicultural benefits found a positive relation between an individual's sense of bicultural integration and both psychological and sociocultural adjustment. Furthermore, negotiating between two cultural systems may not be as stressful as some scholars have suggested; rather, the lack of a strong orientation guided by both cultures may be a component of stress (Nguyen & Benet-Martínez, 2007).

In the aftermath of such natural disasters as hurricanes, earthquakes, and tsunamis, the outpouring of assistance from individuals far removed from the victims of those disasters suggests that more and more of the world's people may be developing a multicultural identity.

#### Conclusion

In today's multicultural societies, adolescents are coming of age in a world where creating a cultural identity has become increasingly complex. In addition, globalization and immigration have also created the need for adults as well as adolescents

to integrate diverse cultural beliefs and behaviors provided for them by multiple agents of socialization. To further complicate the situation, many socialization agents are at times at odds with one another (e.g., parents and the Internet). The task of forming a coherent multicultural identity that allows individuals to become contributing members of society presents stressful challenges. However, the challenges of developing a multicultural identity can be met by developing the skills necessary for success in a multicultural world. These skills allow people to function well psychologically and to contribute to the society they have chosen to help mold.

BII, the advance of cultural pluralism, and socialization processes that promote the factors described in Table 30.1 can assist in this developmental process. A multicultural identity has the potential to enhance our lives because it creates a sense of self-efficacy within the dominant institutions of a society along with a sense of pride and identification with one's heritage. As Bandura (1997) demonstrated, self-efficacy promotes effective performance. Thus, the individual with a multicultural identity is likely to believe he or she can live effectively and satisfyingly within a multicultural society. In the fast-paced changing world of today, that is a notable asset.

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# Cross-Cultural Organizational Psychology

# An African Perspective

# Terence Jackson

Cross-cultural organizational psychology scholars have tended to largely ignore Africa as they have the Majority World as a whole, choosing to draw their scholarship from the Minority (mainly Western) World. Although this is gradually changing, the lack of understanding of a region such as Sub-Saharan Africa is detrimental to research and scholarship. Aspects that impinge on the fundaments of human interaction, and that often take a back seat in organizational psychology, are very evident when studying organizational behavior in Africa. Geopolitical dynamics come to the fore, raising important questions about cross-cultural interactions and the nature of knowledge in organizations. Underresearched sectors such as in the informal sector that constitutes a large proportion of national economies and employment in Majority World countries provide important clues about indigenous knowledge and practices and their contribution. The changing geopolitical context also introduces new dynamics such as the influence of Chinese organization and management in Africa that should be included within our scholarship on cross-cultural organizational psychology in the global context.

# Why an African Perspective?

Organizational psychology scholars have long ignored what Kağitçibaşi (2005) had referred to as the Majority World. Much can be missed from organizational psychology if we overlook the 80% of the globe we call "developing." Africa, as

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part of this 80%, has been under-represented, although it is becoming more prominent in cross-cultural scholarship. Its importance may primarily be understood through an appreciation of the cross-cultural dynamics operating on organizational factors south of the Sahara. Yet one of the difficulties lies in overcoming the pejorative and obstructive influences on scholarship of the "developing-developed" world paradigm (itself a cultural construct, defined by the "developed" world and also adopted by intellectuals and elite in the "developing" world) which still seems to persist, and certainly hampered research well into the 1990s (e.g., Blunt & Jones, 1992; Jaeger & Kanungo, 1990). Partly this is being countered by the increasing use of the more accurate term Majority World, yet this still does not overcome the influences of geopolitical power relations that spill over into the way scholars see and study this diverse and important part of the world, often operating outside the norms of Western business and organization. Extant cross-cultural organizational psychology often fails to properly understand and incorporate indigenous knowledge from the Majority World, and from Africa, within its scholarship.

The developing–developed world dichotomy is indicative of the power relations existing on a global basis in Africa. It influences the way we see organizational dynamics such as leadership and management effectiveness. When considering the cross-cultural dynamics of organizational psychology in Africa, these power relations must be taken into consideration (e.g., see Human's 1996 view on this in the context of South Africa). The disparaging of African culture is but one example of such power relations, and the developing–developed world dichotomy is an articulation of this.

In addition to power dynamics, which must be considered a key element in the cross-cultural dynamics of organizational behavior in Africa, far too little systematic analysis of different cross-cultural levels of interaction has been undertaken. These levels at the very least include the following:

- intercontinental: interaction between Western (in its different varieties) and African cultural influences, otherwise defined as interaction between the Global North and the Global South, which can be pervasive in areas such as education and management practices, and which more latterly includes South–South interactions, for example, involving the increasing influence of China in Africa;
- intercountry: interaction across borders, particularly as organizations increasingly do business in neighboring countries, encouraged through regional economic agreements (an interaction that was generally discouraged during colonial times), but often involving more economically dominant parties such as South Africa and Nigeria and their increasing influence in Africa;
- interethnic: intracountry, intercultural working within organizations where many African countries have a complexity of ethnic and language groupings, and

where such cross-cultural working is commonplace, with often a dominant ethnolinguistic group in particular economic sectors, industries, and organizations.

These are the levels of analysis that impact daily lives, and affect the management of organizations and interaction within them. Most countries in Sub-Saharan Africa are multicultural, all are subject to Western cultural influences, many operate across borders in regional groupings. However, with a large proportion of businesses and organizations operating in the informal economy (representing over 80% of the economy in some countries), there is often resistance to Western forms of organizing and doing business. Indigenous practices and knowledge exist as alternatives to Western impositions of modernization and development (Jackson, 2012a).

The study of cross-cultural interaction in African organizations operating at these different levels and involving power relations has only started to be undertaken. Concepts and theories which are now commonplace in the West, such as Hofstede's (1980) dimensions of culture, are inadequate in explaining cultural interaction in Africa.

Africa's history, even before the slave trade, is one of cross-cultural interaction and often antagonistic dynamics (e.g., Reader, 1998), normally within systems of power relations (based on military, political, social, technological, and economic domination). Modern organizations in Africa still contain these diverse cultural elements: ideas and practices as well as people (Dia, 1996; Merrill-Sands & Holvino, 2000; Noorderhaven, Vunderink, & Lincoln, 1996). Not only is an understanding of these dynamics necessary, but also a reconciling, integrating, and synergizing of disparities contained within these dynamics is essential to understanding behavior in organizations in Africa.

Much can be learned by studying these dynamics in Africa that can be applied and integrated into organizational psychology at a global level. However, a barrier to this is the view that African indigenous thought has little to offer. In some ways it is difficult to know, in a globalized world, what an "indigenous psychology" actually is. Often the power dynamics of indigenous and global influences are ignored completely (Jackson, 2013). The convergence thesis suggests that world cultures are coming together, while the divergence thesis sees cultures as remaining distinct. The current author subscribes to the cross-vergence view that different globalizing/localizing dynamics lead to hybrid forms of knowledge, organization, and action, although not as the power-free dynamic suggested by many authors (Priem, Love, & Shaffer, 2000; Ralston, 2008). These dynamics can best be understood by focusing on three "ideal type" organizational systems that, through historical, modernizing, and localizing processes appear to represent the types of organization present in Sub-Saharan Africa.

### Organizational Systems in Africa

These three types of organizational systems in Africa can be conceptualized as:

- Postcolonial systems, arising through the historical and political legacy of colonial Africa, and representing a coercive-oriented form of organizational leadership. They have arisen through the historical interaction between colonial authorities in Africa (and of course other postcolonial countries) and local authorities where there has been an element of collusion between them and with some resistance from local employees in the form of lack of cooperation of the local labor force, often resulting in the perception of local workers as "lazy" (Jackson, 2004).
- Post-instrumental systems, arising from modernizing economic and structural
  influences, and represented by a results-oriented and seemingly participatory
  organizational leadership. This is often as a reaction against the perceived inefficiencies of postcolonial systems, driven by modern Western influences from
  management education and multinational companies, often in the face of
  resistance by local staff who may see these systems as inappropriate to the
  African situation, but which are often enforced through better salaries from
  Western companies and the lack of employment opportunities in the local
  formal economy (Jackson, 2004),
- *Indigenous* systems, arising from alternative forms of organizing and doing business within local communities, mostly within the informal economy and often in the face of resistance and antagonism from national and international authorities, focusing on humanistic and community-focused values and represented by people-oriented leadership (Jackson, 2012a, 2013).

#### Postcolonial Organization

Descriptions of management in Africa have largely been informed by the developed–developing world dichotomy as noted above, and exemplified in the work of Blunt and Jones (1992), and that of Jaeger and Kanungo (1990), of management and organization in developing countries in general. This historical view has largely laid the foundation of scholarship on Africa. Jackson (2015) makes a distinction between scholarship on Africa, scholarship for Africa, and scholarship from Africa. Particularly important is the distinction between "Western" leadership styles (e.g., teamwork, empowerment) and "African" styles (e.g., centralized, bureaucratic, authoritarian) (Blunt & Jones, 1997).

However, systems of management identified in the literature as African (Blunt & Jones, 1992, 1997) or as developing (Jaeger & Kanungo, 1990) are mostly

representative of a postcolonial heritage, reflecting a theory X style of management (McGregor, 1960) which generally mistrusts human nature, with a need to impose controls on workers, allowing little worker initiative, and rewarding a narrow set of skills simply by financial means. This system is identified in the more critical literature as being "tacked on" to African society, originally by the colonial powers (Carlsson, 1998; Dia, 1996), and perpetuated after independence, perhaps as a result of vested political and economic interest, or purely because this was the way managers in the colonial era were trained.

Postcolonial organizational structures, in terms of their governance and decision-making, can be characterized as having top management that is overworked, and as having authoritarian and paternalistic decision styles with centralized control and decision-making (Kiggundu, 1989). This was also reflected in Blunt and Jones's (1997) view that leadership is highly centralized, hierarchical, and authoritarian. They also added that there is an emphasis on control mechanisms, rules, and procedures, rather than performance (and a great reluctance to judge performance), a bureaucratic resistance to change, a high level of conservatism, and importance of kinship networks.

The character of such organizations may well reflect public sector, state-owned enterprises or recently privatized organizations that are not foreign-owned. Some of the inadequacies which Joergensen (1990) drew attention to, in relation to state-owned enterprises in East Africa, include lack of clear objectives, over-staffing, lack of job descriptions, and lack of job evaluation, lack of incentives, and political interference, as well as poor infrastructure and lack of systems. Part of the inefficiency of postcolonial organizational systems may be the levels of corruption and unethical behavior (e.g., de Sardan, 1999).

Internal policies may be discriminatory as a result of preferences given to ingroup or family members. Kanungo and Jaeger (1990) suggested that because of the associative thinking in "developing" countries, there is a tendency for behavior in organizations to be context-dependent, rather than the "developed" country orientation toward context-independent behavior orientation. In the latter, explicit and universal rules apply to a situation rather than the situation and context determining responses to it. This may lead to decisions based on relationships rather than the application of universal rules, and may therefore be regarded as discriminatory. A reflection also of the theory X nature of management and general distrust of human nature, as well as a lack of organizational democracy, may be revealed in employee policies aimed at duties of workers rather than of rights.

The internal climate of postcolonial organizations may be revealed in employee alienation. Accordingly, Kiggundu (1989) identified a number of features of such organizations: understaffing; poor motivation; risk aversion; unwillingness to take independent action; close supervision of subordinates with little delegation; high-cost, inefficient operations with low productivity; over-staffing; under-utilization; poor pay; and poor morale indicated by high turnover and absenteeism. Diversity,

including ethnicity and gender, also seems to be an issue (Merrill-Sands & Holvino, 2000; although this is inadequately treated in the literature except that pertaining to South Africa). This may be a reflection of discriminatory policies based on context dependency, and promotion by ascription (who you are rather than what you have achieved, for example, Trompenaars, 1993).

Given the coercive orientation of postcolonial systems, managers who fit in well could be expected to be motivated by control features of their jobs and by economic security. Although little research has been undertaken on management motivation in Africa, the few studies that exist (from Kenya and Malawi), although not recent, seem to support this supposition (Blunt, 1976; Blunt & Jones, 1992; Jones, 1986).

The direction of management commitment can also be derived from the above discussion. An indication of a commitment to "business" objectives involves the pursuit of end results at the expense of means, although not reflecting an achievement orientation. Montgomery (1987), for example, noted a regard for internal aspects of the organization rather than policy issues, development goals, or public welfare, remarking on an aloofness of managers in the public sector.

Management principles may be related to an external locus of control in developing countries, where events are considered beyond individual control, where creative potential is regarded as limited, and people are generally fixed in their ways and not malleable or changeable (Kanungo & Jaeger, 1990). This may also reflect a mistrust of human nature, and a belief in the undisciplined nature of African workers in industrial life (Abudu, 1986). I will return to this aspect later.

Decisions in postcolonial organizations are focused in the past and present rather than the future (Kanungo & Jaeger, 1990; Montgomery, 1987) and therefore may be deontological in nature rather than teleological. Action is focused on the short term, and success orientation may be moralistic rather than pragmatic as a result. This may reflect a lack of achievement orientation and status orientation as a management principle. A passive-reactive orientation (Kanungo & Jaeger, 1990) is assumed. This too may give rise to a theory X conception of management.

The way these principles are manifested in management practices is widely accepted in the existing literature as authoritarian management styles with reliance on hierarchy, use of rank, low egalitarianism, and a lack of openness in communication and information-sharing (Blunt & Jones, 1992, 1997; Montgomery, 1987). This may lead to conclusions that the main organizational leadership orientations within postcolonial management systems are geared toward managing internal processes and power relations.

This conceptualization of African leadership within a developed–developing world creates perceptions of fatalism, resistance to change, reactivity, short-term vision, authoritarianism, risk reduction, and context dependency, among others, that may not seem useful when contrasted with management in the developed world. Implicit in this conceptualization is the notion that the developing world should be "developed," and thus become more like the developed world.

The developing–developed conceptualization often fails to recognize other, indigenous, management systems operating in Africa. It is also not sufficiently underpinned by cultural theory. The developing–developed world paradigm reflects a paucity of cultural analysis, and in management theory reflects the traditions of the convergence thesis (Kerr, Dunlop, Harbison, & Myers, 1960).

Where this view of management in developing countries is explained by cross-cultural theory, reference is often made to Hofstede's (1980) value dimensions. Hence, Kanungo and Jaeger (1990) depicted the organizational situation in developing countries as relatively high in uncertainty avoidance (low tolerance for risk and ambiguity), low individualism, high power-distance (reflected in a lack of consultative or participatory management), and low in masculinity (a lack of competitiveness and achievement orientation, and a low centrality of work). Hofstede's (1980) data are not very helpful on African cultures, because he had low sample sizes from West and East African countries that he combined into two regional samples, and a Whites-only sample from South Africa. The more recent results from the GLOBE study (House, Hanges, Javidan, & Dorfman, 2004) are more comprehensive but also somewhat limited in their analytical use.

The popular South African management literature supports a view that African cultures have a collectivist propensity (Koopman, 1991). Blunt and Jones (1992) indicated from the now somewhat dated literature that African societies are low on individualism. More recent studies that included African countries suggested lower levels of values associated with individualism Munene, Schwartz, & Smith, 2000), and higher levels of those associated with collectivism (Noorderhaven & Tidjani, 2001; Smith, Dugan, & Trompenaars, 1996). Yet these say little about the nature of African collectivism, and provide little explanation of the "disconnect" thesis of Dia (1996), who postulated a separation between the individualist institutions of the colonizers (such as the firm) and the more communalistic local populations.

The concept of locus of human value in distinguishing an antithesis between an instrumental view of people in organizations, which perceives people as a means to an end, and a humanistic view of people, which sees them as having a value in their own right, and being an end in themselves, may be more useful in exploring the implications of this disconnect thesis (Jackson, 2002a). The Western concept of "human resources" typifies the former approach in its view of people as another "resource" to meet the objectives of the organization. It is likely that this concept would predominate in postcolonial African organizations to a certain extent. Blunt and Jones's (1992) assertion that African (postcolonial) organization is input-rather than output-dependent may lead to the conclusion that such organizational structure is not functional in the sense of objective seeking. Yet it is difficult to conceptualize such organization as humanistic. Organizations in Japan and other East Asian countries may have been more successful in harnessing the latter (humanistic) approach in order to obtain employee commitment to the organization (Allinson, 1993), but organizations in Africa

have largely not done this. Hence, African workers see work organizations as instrumental toward providing a contribution to their own livelihood (Blunt & Jones, 1992) and that of their communal group.

The instrumental-humanistic construct may avoid some of the pitfalls of applying a developing–developed dichotomy (as in Jaeger & Kanungo, 1990), and of applying a simplistic individualism–collectivism model (Hofstede, 1980) to cultural analysis in explaining differences between indigenous and imported views of human relations. It may also explain the levels of inappropriateness of what is next termed *post-instrumental* management systems. This typifies what Jackson (2015) has termed scholarship for Africa: a modernizing approach that advocates what is best for Africa in view of the perceived deficiencies of postcolonial organization.

#### Post-Instrumental Organization

A belief within the developing–developed world paradigm, reflecting the convergence theory of Kerr et al. (1960) and the contingency theory of Hickson and Pugh (1995) (see also Cray & Mallory, 1998), is that the developing world, through industrialization, should become more like the developed world. This is reflected in the trend for Western management approaches to be imported into African countries through multinational companies, and Western approaches to be sought out by managers who are increasingly educated within Western or Western-style management courses, and trained in Western traditions. This may not only affect organizations in the private sector, but also those in the public sectors, including state-owned enterprises, and those recently privatized enterprises which are in the process of refocusing as a result of downsizing and other major organizational change. This may reflect also a disparaging of "African" (i.e., postcolonial) ways of organizing and managing. Much of the literature reviewed above reflects this disparagement.

Numerous authors (Beer & Spector, 1985; Hendry & Pettigrew, 1990; Storey, 1992; Tyson & Fell, 1986; Vaughan, 1994) have made a distinction, in the British and American human resource management (HRM) literature, between a "hard" organizational perspective, reflecting utilitarian instrumentalism which sees people in the organization as a mere resource to achieve the ends of the organization, and a "soft" developmental human relations approach which sees people more as valued assets capable of development, worthy of trust, and providing inputs through participation and informed choice. Tayeb (2000) quite rightly stated that the concept of HRM is itself a product of a particular Anglo-American culture. It is likely that both the hard and soft approaches taken within Western organizations are a reflection of an inherent cultural view of human beings in organizations as a means to an end (Blunt & Jones, 1997, used the term "functionalism"). If this is the case, it is likely that when Western companies, or

managers educated in the Western tradition, try to implement Western human resource practices in cultural contexts with a different concept of people, and a different regard for people in organizations, incompatibilities will be manifested through lack of motivation and alienation, leading to low productivity and labor relations issues.

The extent to which such manifestations are the case in foreign-owned and Western management-oriented companies in Africa has been little researched. This remains at the moment a hypothesis ripe for testing. The Western ideal is seen as a concern for performance, a drive for efficiency and competitiveness, and a participative style, with relative equality of authority and status between manager and subordinate. This approach also features delegation of authority, decentralization, teamwork, and an emphasis on empowerment. This occurs within a context of acceptance of change and uncertainty, with high levels of trust and openness, and the support of followers being essential to commitment and high morale. Evidence over the last decade has suggested that organizations in Africa are moving more toward this type of Western or post-instrumental approach (e.g., Jackson, 2015; Kamoche, 2001). Yet some are struggling with the ideal of an African indigenous approach, and what this might look like.

#### African Indigenous Organization

It may be somewhat idealistic to try to identify a particular African style or even philosophy of management and organization (Human, 1996), but it is worth pointing to aspects that it may include, so that in empirical studies those aspects may be discerned where they do exist. It is also difficult to identify organizations in Africa that exhibit "indigenous" characteristics, or are consciously attempting to introduce them. I have previously used the term African "renaissance" organization (Jackson, 2011). This was to convey an assumption that such organizational systems were emerging. Yet within the formal economic sector within Sub-Saharan Africa there is little evidence of this. More recent research has shown that elements of this may be found in nongovernmental organizations (NGOs) that have emerged from local communities to meet specific needs. Yet often once such organizations gain funding from international (i.e., Western) funders who impose management conditions on local NGOs, indigenous organization and management practices tend to get submerged (Jackson, 2013). It may be more productive to look in the informal economy.

The informal economy represents "an alternative society, with parallel social and religious institutions alongside the official ones" (Cheru, 2002, pp. 48–49). It is substantial, for Sub-Saharan Africa as a whole, it represents some 42.3% of gross national income and accounts for 72% of employment. In some countries, such as Ghana, it represents about 83% of the total economy (Jackson, 2012a).

This part of the economy represents a likely site of indigenous organization and management that is not emerging (although it appears to be getting larger and more significant), but has been there for many years, has developed from the needs of local communities, and has largely not been influenced by Western forms of organizing and doing business. I will now explore the nature of such organizational and management practices and the values that they are likely based on.

Binet (1970) provided a useful framework on African economic psychology. Dia (1996) presented an account of this work, which can be supplemented and supported by popular African management texts (Boon, 1996; Mbigi, 1997; Mbigi & Maree, 1995), as well as specific anthropological work (such as that of Gelfand, 1973, which is used here to illustrate specific aspects of values of the Shona, a people indigenous to Zimbabwe, and comprising the largest ethnic group in that country). Key values can be summarized as follows.

#### Sharing

A need for security in the face of hardship has provided a commitment to helping one another. However, it is likely this value is not based on simple exchange but is rather a result of a network of social obligations based predominantly on kinship. More recently the concept of *ubuntu* has been prominent in the South African popular management literature, a value built on the assumption that people are only people through other people. Mbigi (1997), for example, suggested that collective trust is a large part of this value that should be developed in organizations before participation and empowerment initiatives can succeed. Certainly Gelfand (1973) suggested that trust (*ruvimbo*) is seen as an important virtue in Shona culture. Openness, sharing, and welcome together form important components of *ubuntu* (Boon, 1996). These aspects reflect a wider community orientation which also includes elements of family and other outside involvement, and a character that involves development and well-being of people, with a general people-orientation and sense of belongingness, trust and openness.

#### Deference to rank

Dia's (1996) assertion that deference to rank refers to power-distance (in Hofstede's 1980 conceptualization), particularly within the organizational context between employer and employee, is probably rather simplistic. Although traditional rulers were such by virtue of their title to the senior lineage, they had to earn the respect of their followers and rule by consensus. Political decision-making occurred through obtaining consensus, and through a system of checks and balances against autocratic rule. People were free to express opinions and dissent (Mbigi, 1997). At the same time, taking one's proper place in the social scale (*kuzvipeta* in Shona) is an important aspect of the virtue of humility (*kuzvidukupisa*), and refers not only to deference to rank and seniority, but also to the senior person showing humility

toward the younger person, and the educated person not looking down on those less educated (Gelfand, 1973). This is leadership control that involves benign rules of action, and promotion based on the legitimization of status.

#### Sanctity of commitment

Commitment and mutual obligations stem from group pressures to meet one's promises, and to conform to social expectations. This involves both involvement within the group and loyalty to one's kinship and community group, as well as obligations and promises to external persons, for example, within business dealings.

#### Regard for compromise and consensus

This certainly involves the maintenance of harmony within the social context, but also qualifies the deference to rank discussed above. Boon (1996) summarized the main characteristics of traditional African leadership by saying that the chief personifies the unity of the tribe and must live the values of his community in an exemplary way; not being an autocrat, the chief must rely on representatives of the people, on councilors to assist him (chiefs were and are male), and must be guided by consensus. Failure to do so would result in his people ignoring his decisions and law. The people are strongly represented, with a duty to attend court hearings, and all have a responsibility to each other, collectively, to ensure the laws are upheld. As a result of this collective responsibility, everyone has a right to question in open court. The concept of openness is an important value and implies that no one should receive retribution for anything said correctly in an open forum. If this is a latter-day idealization of consensual authority, it was also certainly a perception of early anthropologists working in Southern Africa (e.g., Gluckman, 1956). This is reflected in organizational structures that have flatter and more accessible hierarchies, consensus seeking decision-making, internal climates of participation and openness, and protection of rights. Management practices also reflect a participative, egalitarian, and open approach.

#### Good social and personal relations

Social and personal relations stem from many of the aspects discussed above, particularly the commitment to social solidarity. Dia (1996) observed that the tensions of management–labor relations that have been a feature in Western and postcolonial organizations in Africa can be attributed largely to a lack of a human dimension, and to the adversarial attitudes of colonial employment relations. This is reflected in an internal organizational climate of interethnic harmony (although group solidarity may also act against this), other aspects of people orientation generally, and a humanistic orientation.

These values present a different picture to that of Blunt and Jones (1997) and other commentators on organizational management in African countries. Both this view, and an idealized view of what African management could have been

(without colonial interference), are probably too simplistic, as I have stated above. With the increase in interest in African approaches to management, as indicated in the South African popular management press, and the general call for a renaissance of African thinking, values, education, and political transformation (Makgoba, 1999), any description of management systems within Africa should include a consideration of an indigenous African management. Yet, even though there is an increasing interest by Western organizational psychology scholars in studying organizations in Africa, the informal economy, a likely site of indigenous organization and management, is largely ignored (Jackson, 2015). The third type of study that Jackson (2015) identified, scholarship *from* Africa, is embryonic, rather than African indigenous organizational knowledge itself being embryonic. It is there, but still has a very weak voice. Western scholars appear not to be able to identify and articulate it and are certainly not able to integrate it into mainstream organizational psychology.

This discussion has presented three systems of organization as "ideal types" that are purported to be operating in African countries. However, it is unlikely that these are operating in any pure form. The hybridization of management systems is an important consideration in Africa. Concepts of cross-vergence have been operationalized and researched in other regions such as Hong Kong (Priem et al., 2000). These studies indicate that rather than a tendency toward convergence (the coming together of value systems) in regions and countries with high levels of influence from other cultures, there is rather a tendency toward cross-vergence (developing of hybrid value systems as a result of cultural interactions). Yet as noted above, extant theories tend to represent cross-vergence as a power-free process, where all voices are perceived as equal. Yet the nature of change, and continued influences from different cultural sources in African countries (some stronger than others), may indicate the development of hybrid systems of various forms.

# Leadership Styles in Africa

There has been little evidence of the nature of these hybrid forms of organization and how they are manifest in terms of organization and leadership in Africa. In a 15-country management study, the current author (Jackson, 2004) linked these organizational forms to leadership styles in order to gain empirical evidence of the nature of management and organization. In particular, Etzioni's (1975) control styles were linked to the three "ideal" organizational types as follows:

- postcolonial: employing coercive control;
- post-instrumental: employing remunerative control, or a results focus;
- African indigenous ("renaissance"): employing normative control or a humanistic/people focus.

The results of this survey of managers across 15 countries revealed a combination of coercive or controlling mechanisms indicative of postcolonial management systems, and results-oriented, remunerative control systems indicating the introduction of modern post-instrumental management systems. This appeared to support the view of Kamoche (1992), whose case study research indicated an introduction of Western practices, yet still reflected the views of, for example, Kiggundu (1988) and Blunt and Jones (1992), who saw organizations in Africa as authoritarian and hierarchical—predominantly postcolonial—systems.

Yet despite a low people-orientation across the 15 countries, managers appeared to have a strong desire to see a greater emphasis placed on a humanistic approach. With few exceptions, there appears to be a disparity between the perceived ideal situation, the current one, and that projected for the future. Nevertheless, with this particular orientation, by which managers express the way they would like things to be in their ideal form, there is greater variation among the countries than when they are expressing the way they see it at the moment, and the way it is going. If we make the logical assumption that the way managers see things at the moment and the way they are going reflect the perceived current organizational reality, their expression of an ideal can be seen as a value judgment of what should be, rather than what is, of leadership and management styles. It is the way managers would wish it to be, and reflects their own values and attitudes (although not necessarily reflecting their behavior). This may explain why there is greater variance among the 15 countries for the ideal. Structures and systems may well be similar across a number of countries, yet values and management attitudes may be quite different. Managers from the Democratic Republic of Congo (DRC), for example, had a much lower desire for humanistic leadership than managers in Botswana, Kenya, or South Africa.

Some conclusions about leadership in African countries can be drawn from these findings:

- The values that managers hold of the ideal leadership and management style in organizations are out of line with the actual nature of organization in Africa. As this involves power relations that are enforced through control systems, and which tend to be low in consultation and consensus, this does not allow attitudes and values stemming from the cultural context of Africa to be converted to management actions. In other words, leadership in African organizations seems generally to be out of kilter with African cultures.
- Although there is some variation among African countries in what managers see as actual leadership and management styles in organizations, there appears to be greater variation in aspirations and ideals of managers among the countries. If this is a reflection of the cultural context in each country, we might assume that although the management influences on organizations in each country are similar, the cultural context is not. Generally speaking, it is unlikely that these differences are taken into account by organizations operating in different countries (e.g., multinational organizations).

In order to take account of the expectations and ideals of managers, organizations should be moving toward a people- and results-orientation and away from a coercive controlling orientation (although with variation among the countries taken into consideration, e.g., DRC).

If organization and leadership style, as is, are out of kilter with African indigenous cultures, what are the implications for employee motivation and commitment?

#### Staff Commitment and Motivation in Africa

Coupled with the difficulties of managing in Africa, there may still be a legacy of the idea of the "lazy African" (Dumont, 1960), who lacks motivation (Blunt & Jones, 1992; Kiggundu, 1988) and has a high expectation of personal and family benefits, but low commitment and loyalty to the organization (Jones, 1986). Yet taken alongside the industriousness (Abudu, 1986; Ayittey, 1991) and entrepreneurial attitudes (Mbigi, 1997; Wild, 1997) noted outside the organized workplace (and particularly within the informal economy: Jackson, 2012a), this assumption bears closer examination. Abudu (1986) proposed that attitudes of Europeans toward Africans in the colonial period could be explained by racial arrogance and a failure to appreciate the socioeconomic background.

One of the main challenges in the management of people in Africa, as elsewhere, is reconciling differences between home and community life, and the world of work. That is, organizations must reconcile societal culture with organizational culture (Jackson, 2004). Yet within the formal economy, whether the postcolonial structures of public sector "parastatal" organizations and large commercial sector organizations with a colonial heritage, or Western multinational companies, organizations in Africa seem not able to do this. It may only be within the informal sectors from smaller entrepreneurial companies to other organizations growing out of local communities and sharing community values, that are more able to marry work and home/community life.

# **Toward a Conceptual Model**

Katz and Kahn (1978) used the term "control" to convey the styles of management used as "bases of compliance to produce the coordinated patterns of social behavior known as organizations" (p. 284). As we have seen, Etzioni (1975) posited three main forms of control: coercive, remunerative, and normative. These have implications for employee motivation.

 Coercive power operates by being able to punish or compel through physical or other means, and would be related to authoritarian management styles.

- Remunerative power is based on an ability to reward people through monetary means or withholding or supplying other tangible resources, or intangible resources related to remuneration, such as promotion, and would be related to results-oriented management styles.
- Normative power relates to the ability to use moral and symbolic influence and is more likely to be based on obligatory or reciprocal relations. This may need more explanation beyond Etzioni's (1975) conceptualization, and must be placed within a cross-cultural frame of reference and linked with obligation and shared values (Jackson, 2002b). This is very much a humanistic and people-centered perspective that encompasses Etzioni's concept of normative control. Normative values have to be shared and internalized and cannot be imposed. This suggests that people are involved in the organization as individuals with a value in their own right, and part of the corporate body, rather than as a means to an end as in an economic contractual relation, or a coercive relation with the organization. It would therefore be related to people-oriented management styles.

Etzioni (1975) suggested that these different forms of control influence the type of employee involvement with the organization. Hence:

- Coercive power would be associated with alienative involvement (or at best compliant involvement) with a corresponding lack of involvement in, or commitment to, the company.
- Remunerative power would be associated with calculative involvement where people are committed explicitly as far as they are rewarded appropriately, and as far as they lack alternative employment choices.
- Normative power would be associated with moral involvement where commitment is internalized and is implicit.

These three control types, and the type of employee involvement associated with them, can be linked directly to the three ideal organization types discussed above in the way employees are managed and the way employees are likely to respond:

- Postcolonial management: Derived from an historical colonial heritage, and including remnants of institutions tacked onto local communities (Dia, 1996), this is largely interpreted as "African" management (Blunt & Jones, 1992) or a management style of developing (as opposed to developed) countries (Kanungo & Jaeger, 1990). It is seen as autocratic, hierarchical, centralized, and bureaucratic. It is most linked with Etzioni's (1975) coercive control and management styles and alienated or compliant employee commitment.
- Post-instrumental (Western) management: Evidence of the influence of Western HRM and management generally in Sub-Saharan Africa was provided by Kamoche (2000) and Jackson (2004). This is essentially results-oriented, and

seen as an alternative to "African" (or, more accurately, "postcolonial") management in the sense of a modernization project within a developing–developed world paradigm. It is most linked to Etzioni's (1975) remunerative control and reflects results-oriented management styles and calculative employee commitment.

• *Indigenous* (humanistic/communalistic) African management. Indigenous approaches to management such as the *ubuntu* concept in South Africa (Mbigi, 1997) arise from the needs of local communities. There is an emphasis on people as the major focus, together with a consensual approach to managing. It is more in line with Etzioni's (1975) normative control mechanism, as it appeals to people's community values and attempts to integrate the values of the work organization with those of community life. It reflects people-oriented management styles, and moral employee commitment may therefore follow.

Again, recognizing the absence of empirical evidence about employee commitment in organizations in Africa, the current author collected, with research collaborators, data from four countries: South Africa, Kenya, Cameroon, and Nigeria, in approximately 10 organizations from different sectors in each country (Jackson, 2004). This replicated the questionnaire used in the management survey, focusing on employees' perceptions of coercive-, results- and people-oriented management styles, and sought perceptions on the current and ideal situations in their organizations. Within this study significant differences existed among country scores for current people- and results-oriented styles, but not ideal scores. This indicates a general desire among employees in the four countries that their organizations move more toward both people- and results-orientations. Employees shared a perception that these two orientations were lower than their ideals, and they saw their organizations as more results-oriented than people-oriented. Moreover, Nigerian employees saw their organizations' management styles as less people-oriented than employees from the other countries. Kenyan employees saw their organizations' management styles as more results-oriented than the other countries. Cameroonian employees saw their organizations' management styles as more coercive-oriented than employees from the other countries, but this was also represented in their ideal. Hence, Cameroonian employees appeared to favor coercive-oriented management significantly more than employees from the other countries.

Despite the fact that Cameroonian employees did not appear to associate coercive-oriented management directly with their work motivation, they did associate it with successful and ethical management as well as with high levels of management skills in their organizations. None of the groups favored low levels of coercive management, with all "ideal" scores falling above the mid-range score of 3. South Africans had the lowest ideal score and theirs was the only group of employees to negatively associate coercive management with work motivation, and to not associate it with successful organization.

It would appear within this study that employees positively associate both people- and result-focused management styles with work motivation as well as with their organizations being ethical and successful, and having high levels of management competence. Nigeria is an exception in that no such connection appears to be made between people-oriented management styles and work motivation and successful organization. This could be because the vestiges of colonial, coercive management are still present, despite a move toward result-oriented, Western-style management. Certainly, this is also reflected in the correlations between work motivation and result-oriented styles for Nigeria. Higher significant correlations between people-oriented management and work motivation for South African employees appear to reflect the strong articulation of empowerment and *ubuntu* in that country (Jackson, 2004). Yet Kenya also yielded similar results without this kind of articulation in the popular management press.

Although employee motivation is under-researched in Sub-Saharan Africa, the results from this study (Jackson, 2004) appear to support the assumption of a connection between management styles or the type of management control used in organizations, and work motivation. There is an assumption in the literature that coercive styles are in some way indigenous to Africa (e.g., Kiggundu, 1988), yet they appear not to be associated with work motivation. Although the appropriateness of Western-style results-oriented management appears to be supported by these results, there is a clear indication that management should be more people-oriented, or people-centered, perhaps reflecting a humanistic, indigenous African approach. In this regard, formal organizations in the public and commercial sectors may have much to learn from organizations in the informal sectors that exist in all African countries, in terms of culturally appropriate forms of organizing and managing.

# Indigenous Psychology and Interethnic Level of Analysis

So far, much of this chapter has been concerned with the intercontinental level of cross-cultural interaction—that is, West–non-West, or North–South dynamics. This is important because it provides the means of understanding power dynamics, and aspects such as the transferability of knowledge across continents, or indeed from one national cultural group to another. This is where Hofstede's (1980) work is useful as it provides the basis for a critique of the appropriateness of Western organizational and management systems in non-Western countries. Understanding the intercontinental level of cross-cultural interaction is important in Africa, because the colonial legacy permeates many aspects of organizational life. This includes interaction at the interethnic level.

An interesting finding from the 15-country study discussed above (Jackson, 2004) was the lack of significant differences among within-country ethnic groups, compared with the significant differences found between the African countries.

The nations that constitute Africa were artificially created out of the power struggles of the colonial powers. In fact, these powers came together in Berlin in 1884 and divided up the continent of Africa between them. The accepted wisdom has appeared to be that, in view of the artificially created states, culturally ethnic groups are more important than national groups. Yet history has proved that these nation-states are stable. There are very few border disputes between African countries. Despite continual cross-border interaction within ethnic groups (as often the colonial powers split up ethnic groups between two or more national borders), the current author's findings (Jackson, 2004) appear to suggest that nations might be more important than ethnic groups in terms of cultural identity. There are several reasons for this, which are important for the study of indigenous psychology in Africa. These reasons, which we will now explore, consist of the colonial creation of ethnic groups, the shifting allegiances of ethnic identities, and migration and the identification of the "indigenous."

### Colonial Creation of Ethnic Groups

Thomson (2000) argued that current ethnic groups are a creation of colonialism. Thus, the Hausa-Fulani, Yoruba, and Igbo of Nigeria, became the dominant groups in three regions of post-independence Nigeria (northern, Western, and eastern, respectively), where "tribes" were encouraged to develop in order to work with the colonial authorities to distribute resources. Ethnic groups that had previously had only loose and changing affiliations came together as tribes, otherwise they had little power in dealing with the authorities and gaining resources.

Thomson (2000) described the example of the Yoruba, which he claimed is a modern social and political construct. Previous to colonial rule, the term Yoruba did not exist. People of the region identified themselves as Oyo, Ketu, Egba, Ijebu, Ijesa, Ekiti, Ondon, or members of other smaller groupings, although they were aware of each other and had links through trade, social contacts, or war. They had a common language, but with different dialects that were not always mutually understandable. The colonial authorities wanted larger communities to deal with, as did the missionaries who consequently invented a standard Yoruba vernacular based on the Oyo dialect, and printed a Yoruba Bible. If people wanted access to Western education, they had to adopt this common language.

# Shifting Loyalties

This identification with a larger or more important group can be found in people's pursuit of better job opportunities. Nyambegera (2002), for example, pointed out the impact of ethnicity on areas such as recruitment and promotion opportunities. This is bound up with power relations within interethnic interactions in the

workplace, where an ethnic group tends to predominate. Studies in the private sector in Cameroon found evidence of this particularly in the public sector, where national politics also becomes embroiled and can have a profound effect on how organizations and people are managed (Jackson & Nana Nzepa, 2004).

The role of political polarization by ethnicity and the resulting degree of political influence on HRM in Cameroon can be discerned first by the results of a survey undertaken in five ministerial departments, managed by three political parties. Three of these ministerial departments were managed by heads from the ruling party. Two departments were managed by two different opposition parties. An analysis of political affiliation according to appointment shows that for top-level managers (director to under-minister) 80% (of a total of 78 appointments made within the five ministries) were politically motivated. Top jobs in Finance, Post, and External Affairs were held by people from the ruling party; the Industry and Commerce Ministry was directed by the president of the ruling party; and the Scientific and Technical Research Ministry was headed by a member of the major opposition party.

It is normal for such managers to campaign for the ruling party during elections, rather than being at their posts, in order to maintain their positions. The implication of this may be the exclusion of talents of people not belonging to appropriate political parties and ethnic groups. The public service also experiences a relatively high turnover of managers, as people fall out of favor and others fall into favor. Being seen to be actively campaigning, and indeed returning the ruling party to power, is a means of safeguarding one's job. Yet this situation also appears to give rise to inequity, frustrations, and low motivation at managerial levels. It also provides evidence of a dual system: a formal system put in place by French colonialism, and an informal system which has implications for power relations within interethnic interactions.

The informal system, generally established and used in preference to the formal system, has as its main function the dominance and preservation of power of the dominant group and its allies. Hence, formal power through the administrative influences of HRM systems (e.g., formal selection, appraisal, and promotion procedures) is weak in terms of challenging the interests of the dominant group. This "tribalization" of the managerial workforce appears not to relate to any inherent ethnic antagonisms, but simply to political polarization along apparent ethnic lines (Jackson & Nana Nzepa, 2004).

At the level of recruitment and promotions, political patronage may not only affect who is favored. The process of ethnic phagocytosis (smaller groups being swallowed up by dominant groups) that this stimulates may actually be having an effect on the apparent ethnic composition of the country. It is therefore not unusual in the private sector of the economy, for Bakoko or Yabassi (both minority ethnic groupings) to present themselves as the more prestigious and influential Douala in the commercial city and port of the same name. Similarly, within the

public sector, members of the various small minority groups around the Central Province may present themselves as the politically dominant Beti.

These aspects of politicization and tribalization affect the way people are managed in public sector organizations. This results in a lack of formal rules of recruitment and career progression: no promotion at the higher managerial levels in the public sector can be accepted if not approved within the informal system. The real decision-makers are not the leaders or managers of the formal system, but rather the king-makers of the informal system who appear to be motivated along political/ethnic lines. Apart from providing a better understanding of the fluid nature of ethnicity, and its relationship to power dynamics, this also enables the organizational psychologist to question the efficacy of any formal motivational system introduced in organizations where these informal processes may be in operation.

#### Identifying the "Indigenous"

It is very difficult, in the context of Sub-Saharan African countries, to conceptualize and identify "the indigenous" or "an indigenous" people. For example, in the context of South Africa, the Khoisan peoples are generally regarded as the original occupants of the southern part of the continent, although have been now mostly obliterated by successive Dutch and British colonists (Beinart, 1994; Sparks, 1990). The Bantu people more recently moved into this part of the continent from much farther north and are now regarded as the "indigenes" (Reader, 1998). The extent to which Afrikaners established a "tribe" within South Africa, as quite distinct from their mostly Dutch origin, allowed them to be thought of equally as colonists and as indigenes some three centuries after the first settlements were established. If indigenous Blacks suffered under apartheid, so did the Afrikaners suffer under British rule. Yet to what extent can a White African "tribe" be thought of as indigenous? Clearly Afrikaners have no other home, other than in South Africa. These issues are well known and contested in South Africa (Beinart, 1994; Sparks, 1990). Similar issues could be raised within the context of the U.K. and the U.S. in relation to successive waves of immigration and migration; who are the indigenes, and what constitutes the indigenous? This has implications also for what we consider indigenous knowledge, attitudes, and values, as well as organization and management, yet this also carries further issues of who identifies what is indigenous.

Within indigenous African institutions the chief is seen through Western eyes as an autocrat and his institutions reflect this high power-distance, in much the same way as we saw that the African organization is identified with a postcolonial construct. This is a view contested by Ayittey (1991), who described many African societies' chiefs as ruling by consensus. However, the view that African organizations can somehow revert back to indigenous values and structures is, as Human

(1996) suggested, slightly naïve. Unraveling the indigenous from the long history of colonial occupation, intercontinental and intra-continental migration, and settlement is a complex project.

For example, Marsden (1991) described the use of the term "indigenous" in three ways. First is the reference to indigenous people. In this sense, the term as it is often applied to marginal peoples such as Native Americans or Australians, is difficult to apply to African countries. In colonial times, the whole Black population was often marginalized, and given second- or third-class status. The dispossessed today are a result of rapid urbanization and the breaking up of traditional agricultural rural communities and movement to the large cities. Marsden's second use of the word is in the context of "indigenization," for example, following independence from colonial rule, and is not directly relevant here other than noting that this may have led to discrimination, for example, against Asian groups in East Africa.

Marsden's (1991) third sense of the use of "indigenous" is in "insider knowledge": local approaches to management that reflect knowledge of the local context and local communities. Marsden (1991) gave the example of insider knowledge systems in farming. This therefore does not assume an indigenous people, but rather implies a distinction between what can be regarded as "local," as distinguished from "global." Global here could mean "Western," but could also be "Eastern"—the issue is imposition by, or adoption of, the "foreign." It is a knowledge of the local, by local people "who know what will and will not work" (Marsden, 1991, p. 31). Perhaps a way of linking these different concepts of "indigenous" may be to introduce a factor of social solidarity: that is, identifying oneself as part of a local community, having its own networks and insider knowledge and favoring one's fellow group members. In other words, one may take a lead from the literature on collectivism, where identity is based on belonging to a social group or network (Hofstede, 1980; Triandis, 1990) to the extent that the solidarity of collectivism is target specific: aimed at in-group members, and exhibiting different behaviors and attitudes toward out-group members (Hui, 1990). Here, insider knowledge may well be guarded and kept from out-group members, as Hui's (1990) discussion of Chinese family businesses suggested, and as the lack of knowledge on successful informal African micro-businesses suggests. An understanding of the indigenous as insider knowledge should therefore be qualified to reflect the multiple influences on the management of organizations in Sub-Saharan Africa.

Yet more recent research has focused on the political nature of indigeneity, where it stands in contradistinction to colonial or global powers, and often in direct opposition to these (Jackson, 2013). As such, when scholars study indigenous organizational psychology, they must recognize and embrace this political aspect. For this purpose, a likely site of indigenous organization and management is the informal economy as posited previously.

The informal economy appears to mirror closely the characteristics of indigenous organization whereby it is normally depicted as distinct from, while standing in relation to, the formal economy. As are indigenous forms of organization and

business entities, informal firms are seen as backward and needing to be brought into the formal sector (Potts, 2008). It is also marginalized from, while representing an alternative to, mainstream business and society. World Bank/International Monetary Fund-imposed structural adjustment programmes (SAPs), economic liberalization, and a retreat of the state appear to have left huge gaps to be filled by local and community-based business initiatives. These gaps are in areas including housing, employment, law and order, transportation, refuse collection, trade, and household credit supply (Cheru, 2002), responding directly to the needs of local communities for the supply of goods and services, and employment as well as to create livelihood and wealth within communities, despite often direct opposition from national and international authorities. The informal sector constitutes "... a dynamic and enduring force that has shaped African cities" and represents "... an alternative society, with parallel social and religious institutions alongside the official ones" and "... a node of resistance and defiance against state domination" (Cheru, 2002, pp. 48-49). As such, it plays a role in defending traditional modes of production and commerce as well as skills development, such as in traditional apprenticeships (Adams & the World Bank, 2008). The investigation of indigenous knowledge from within the informal economy and its contribution to developing appropriate organization and management, not just in Africa but in other regions of the Majority World, should form a major part of future research.

# The Changing Global Landscape

As argued above, indigeneity is related, normally in its opposition, to global dynamics. As Cheru (2002) has argued, it has stood in opposition to colonialism and now globalism, representing an alternative to what Western modernization has to offer. Yet these dynamics are changing as countries that were consider part of the "developing" world, or the Majority World, are now interacting more closely with African countries, and offering an alternative to Western aid and modernization. Particularly China, but also India and to a lesser extent countries like Brazil, are challenging the West's previous economic and political domination in Africa.

The influx of Chinese investment and multinational companies is affecting organization, management, and employment practices (Jackson, 2012b, 2014; Jackson & Horwitz, 2017; Jackson, Louw, & Zhao, 2013). This has implications for how we study intercontinental interactions. Although some observers have posited China as the new colonialists in Africa, Jackson (2012b) has pointed out the quite different histories between China and African countries as an anticolonial interaction, while pointing to the synergies between cultural values and how this may have different implications for indigenous African organization and management. Emerging literature in this area should be taken into consideration in future research.

#### Conclusion

It is important to understand that in order to do cross-cultural psychology in Africa, there is a need to pay attention to at least three levels of cross-cultural interaction: intercontinental, cross-border, and interethnic. The intercontinental is particularly important because it substantially affects the other levels. National borders were defined by colonial powers and dictated the nature of interaction between them; the legacy of this still exists today in lines of transport and communication. Colonial powers also in some cases defined ethnic groups and influenced the nature of the indigenous. Yet the presence of countries such as China in Africa may be changing these dynamics.

At all these levels of cross-cultural interaction, power dynamics should be given consideration. Cross-cultural psychology has not really provided good theories and tools for dealing with these power relationships other than at the interpersonal and organizational level. We may therefore have to look elsewhere. Postcolonial theory (Said, 1978/1995), to a certain extent, has provided a better critical understanding of the impact of geopolitical factors on cross-cultural psychological phenomena (Jackson, 2012b), yet is now likely to be outdated as new global relations develop between countries of the Majority World. A fertile region to explore these emerging dynamics and their implications for cross-cultural organizational psychology is Sub-Saharan Africa, where these issues are perhaps more manifest and in need of addressing than in the so-called "developed" regions of the globe.

#### Note

The 15 countries were Botswana, Burkina Faso, Cameroon, Côte d'Ivoire, Democratic Republic of Congo, Ghana, Kenya, Malawi, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Zambia, and Zimbabwe.

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# Part XI Personality

People have long wondered why humans are the way they are—how individuals arrive at their conception of self, and the traits that define them. Views that attempt to describe and explain personality have arisen within both Eastern and Western traditions.

Although Western courses in psychology and in personality theory have typically described European American approaches to the field, they have less frequently presented an understanding of personality deriving from the cultures of the East. This is true despite the fact that some Eastern perspectives predated popular Western theories by at least two millennia. However, just as the student of personality should be aware of the psychoanalytic, behavior, humanistic, cognitive, and trait theories of the West, so too should the student understand such Eastern perspectives as those originating with Confucius and the Buddha.

These Eastern viewpoints describe a different relationship between individuals, families, and communities. They see well-being as an aspect of social relations and the extent to which the individual fulfills them. Further, in the Buddhist view, we will inevitably experience suffering, and we are defined by how we respond to it.

Just as Eastern perspectives have enjoyed increasing interest among Western psychologists in recent years, so too has the trait theory that grew out of the Five-Factor Model of personality. Five-Factor Theory, unlike some earlier Western personality theories, has an empirical foundation, and significant cross-cultural validity. Despite criticism of some of the methods used to study it, and general criticism of the notion of trait theory, the Five-Factor Theory continues to generate much research and numerous efforts to investigate its potential universality.

# Culture and Theories of Personality

# Western, Confucian, and Buddhist Perspectives

Peter J. Giordano

Some of the most compelling questions that humans ask are: "What makes people tick? What factors coalesce to form our personalities? Or how do we change?" These perennial questions have been asked for centuries, millennia even, by philosophers, theologians, epic story tellers, novelists and, most recently, by psychologists. These queries continue to animate discussions in one form or another in local pubs and in college classrooms around the globe. These questions will not let us rest because they are central to our identities and because they defy easy answers.

Psychology as an academic discipline started systematically to probe these questions when Sigmund Freud began to sculpt his theory beginning in the late nineteenth century. His was the first comprehensive theory of personality offered in the West. His thinking has not only shaped a good deal of how we imagine ourselves and others, but also has led to intellectual debates that in turn generated competing understandings of human personality. The richness of these perspectives continues to drive thinking and research in this domain.

All of us, whether trained as psychologists or not, are implicit personality theorists (Anderson, Rosenfeld, & Cruikshank, 1994), drawing on our personal experiences to mold our views of self and others. At the level of formal theory construction, personal experiences have shaped how theorists have constructed the ideas in their theories. For example, the context of Freud's life clearly influenced how he thought about the dynamics and motivations of human personality (Gay, 1988). The same holds true for the difficult interpersonal relations in Maslow's home of origin or for the religious overtones in Carl Rogers' childhood and adolescence. We easily accept that the personal experiences of these theorists structured their approach to understanding the development of persons. And we

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readily allow that the wider sociocultural conditions surrounding their lives shaped their thinking about human behavior and motivations. For example, Freud's witness of the tragedy of World War I and the events leading up to the explosion of World War II molded his understanding of the motivations of the human psyche. In our contemporary world, advances in genetics and brain biochemistry are influencing discourse about personality development and change.

Locked within our own cultural context, however, we may be less perceptive of how the *wider* circumstances of our cultural heritage shape our thoughts on these matters. By "wider" circumstances I am not referring to specific world events, such as those I cite with regard to the development of Freud's thinking. Rather, by "wider" circumstances I denote those cultural beliefs or expectations that are so much a part of how we think about ourselves that we accept them without critical examination.

Consider this example to illustrate my point. When my youngest son was a senior in high school, he had the good fortune to take a course titled *The History of Ideas* from a gifted teacher. The course was essentially a "great books" course, and Michael read and discussed some of the celebrated works of literature and philosophy by writers such as Socrates, Plato, Homer, Plutarch, Descartes, Shakespeare, Sartre, Tolstoy, and many others. What a course for a young student to experience! Missing from this list, however, were great works of literature and philosophy from half a world away—works by Confucius, Mencius, Laozi, Zhuangzi, or the Buddha. The course was wonderful, but would have been enriched had Michael had the opportunity to explore the work of these persons as well. I do not fault the teacher. I think it merely reflects a cultural bias that many North Americans hold.

We have a corresponding situation in our understanding of theories of personality. We study powerful theoreticians from Western culture, but we may omit important material from Eastern traditions. As a specific example in this domain, one that I introduce now and work with in more depth later in this chapter, reflect on how in the West we construe the notion of personal identity. Typically, we think of a person as an autonomous actor who, despite external forces, is largely in charge of his or her own destiny. Consider the personal story of Barack Obama, someone who rose above difficult personal beginnings and, by the power of his intellect and personality, overcame many obstacles to become President of the United States. How did this happen? A typical answer we offer is that he "pulled himself up by his own bootstraps" and worked diligently to achieve what he has. His is a great American story because it embodies ideas that Americans hold dear.

Other cultures, particularly those in the East, however, might take a different approach to understanding the developmental trajectory of Mr. Obama's life. Rather than focusing on his *individual* abilities, dispositions, and accomplishments, those from an Eastern culture might instead concentrate on how his *relationships* with others contributed to the narrative of his life, how he fulfilled the various

obligations to those relationships, and how those relational activities shaped his identity, his understanding of the complexities of working with others, and his ultimate rise to the presidency. The differences in these explanations, the autonomous actor versus the relationally constructed person, are important and reflect significant cultural differences in how we think about human personality.

The aim of this chapter is to explore how some Eastern traditions might understand human personality. Because of increasing global interconnectedness (e.g., economic, social, and political intersections), it is more and more imperative to do so. It is intellectually short-sighted to believe that Western approaches to personality theory have the final say in approaching the question of what makes us tick. My emphasis in this chapter, I should note, will be on theoretical thinking, rather than on cross-cultural investigations of individual differences derived from empirical research in personality psychology. My assumption is that if we seek to understand Eastern perspectives on personality in their own right, rather than compare them to Western approaches, we will be better equipped to generate more ecologically valid studies of the utility and validity of these approaches. In so doing, we will also avoid the tendency to judge other cultures and their ideas as inferior to our own (Keith, 2008). The scientific challenges are great, of course, as investigators empirically examine Eastern approaches to personality. Issues of translation of important texts, as one case in point, are significant, although I do not address this topic in this chapter. As we shall see, some of this empirical work is already well under way (e.g., Hwang, 2006; Wallace & Shapiro, 2006), although even some of our best efforts (e.g., Wallace & Shapiro, 2006) encounter significant challenges to how language is used and concepts are understood (Sugamura, Haruki, & Koshikawa, 2007).

In the remainder of this chapter, I will first give a brief overview of the primary personality theories that have dominated Western discourse on this topic. Later in the chapter, I present two Eastern systems for approaching questions of personality, the Confucian and the Buddhist traditions, both having their origins in Asia, the former in China and the latter in India, then migrating to China, Korea, Japan, and ultimately to the West.

A legitimate question at this juncture is: why deal with the Confucian and Buddhist traditions? Isn't it true that these two approaches are philosophies or religions? Why are they presented in this chapter? I work with these two traditions because I believe they can be viewed as case examples from the East of potent systems for understanding personality. We can understand them as theories of personality because they deal with the same issues and questions that formal Western theories do. For example, each of these approaches, using constructs and technical vocabulary different from those Westerners may be accustomed to, posits basic elements of personality, presents ideas for how personality develops, offers explanations for why people suffer, and suggests activities for alleviating suffering (Giordano, 2014, 2015). They also each present a model for the mature

and mentally healthy personality, something that has been a concern of all the great Western personality theories and that reflects the contemporary Western emphasis now known as positive psychology (Seligman & Csikszentmihalyi, 2000).

I should note that approaching Eastern traditions in this way is not new, although it is something that has not been a focus of attention in the past several decades, particularly as the empirical foundations of personality psychology have been more firmly established. For example, with a Tibetan mandala on the front cover, the third edition of Hall and Lindzey's classic Theories of Personality text (1978) contained an extensive discussion of Eastern Psychology, whereas the fourth and last edition of this book (Hall, Lindzey, & Campbell, 1997) did not retain the chapter on this topic. Moreover, the edited volume Asian Psychology (Murphy & Murphy, 1968) presented a wide-ranging discussion of some ideas within the "psychologies" (their term) of India, China, and Japan. The material in this book is largely of historical interest at this point in time, however, because the editors did not have the benefit of recent scholarship (e.g., recent translations and empirical work) in this domain. It is also well known that Carl Jung studied Eastern thought (e.g., Jung's Collected Works, Vol. 11, 1963a; Wilhelm & Jung's Secret of the Golden Flower, 1962) as he formulated his theoretical perspective. His interests, however, are sometimes seen as bordering on mystical, something this chapter does not endorse. To be fair, I should note that in the psychotherapeutic domain (one dimension of most personality theories), there has been a relatively stable interest in Eastern therapy techniques (Corsini & Wedding, 2008) and some, though not many, personality theory texts have maintained an interest in Eastern ideas (Frager & Fadiman, 2005).

Decades ago, Allport (1938) observed that psychologists are sometimes deficient in their attempts to describe personality with any degree of richness or detail, particularly when compared to the skill of novelists. Novelists, Allport argued, are able to capture a complexity of description that can leave contemporary theories appearing to be insipid. I believe Allport's observation is still relevant today, despite remarkable advances in the field. We have made great strides in empirically investigating the claims of personality theories with the aim of refining their precision and accuracy. Indeed, one measure of the validity of these perspectives is the degree to which they may be empirically verified. Clearly, Western personality psychology has made important progress in this domain, enhancing our ability to retain that which appears to be valid and reliable. Many chapters in the volume highlight important advances in this domain.

However, in a line of thinking similar to Allport's, Monte (1999) asserted that the individual found in a scientifically verifiable theory may not resemble too closely the individual sitting across from you in a restaurant or beside you in a movie theater. Both Allport's and Monte's opinions point to the continuing need to refine our *theoretical* thinking so as to best capture the nuances of human personality. Looking East to other perspectives may help us create a more comprehensive and culturally sensitive understanding of personality function, something that is one goal of this chapter.

But one might also ask if we are not diluting the science of psychology by adopting what sounds like a non-empirical approach. This concern is legitimate. However, there are a number of reasons for looking to Eastern systems of personality to help inform our thinking. First, it is not unique that these systems, at this point in time, are difficult to investigate empirically. The same is true of many Western approaches, including a number of ideas in Freud's thinking and the work of many neo-psychoanalytic theorists. Though empirically difficult to investigate (Popper, 1959), these theories still make important contributions because they are comprehensive, useful, internally consistent, and provide important heuristic functions, all qualities of solid theoretical systems.

Second, working with Eastern perspectives brings into clearer focus how Western ideas may seem alien in other cultures, and may not apply very well to persons living in those cultures. The converse of course is that Eastern ideas may seem foreign to Westerners, a problem for Western personality teachers and researchers. If our aim, however, is to understand personality in a more three-dimensional or holistic way, then we do well to consider conceptualizations that may run in new directions from our ordinary way of thinking. Again, in a world in which we increasingly interact with others from cultures different than our own, it behooves us to understand a variety of cultural perspectives.

# **Western Theories of Personality**

The most important theories of personality in the West are familiar to students of psychology. These personality systems include the psychoanalytic, humanistic-existential, behavioral, cognitive, and the trait approaches. In this section of the chapter, I briefly summarize these approaches with an eye toward understanding the primary emphases of these perspectives. In so doing, I pay scant attention to important considerations such as the application of these theoretical ideas to helping people, the primary research methods used by the various theorists, or the status of empirical support for these perspectives. A more extensive treatment of these theories can be found in any text on theories of personality or elsewhere in condensed form (Giordano, 2008; Lewis, 2008).

## The Psychoanalytic Perspective

The psychoanalytic perspective, originating with the thinking of Viennese physician Sigmund Freud, who worked tirelessly on the construction of his theory from the late nineteenth century (Breuer & Freud, 1895) until his death in 1939, is one of the most dominant and controversial theories of personality in the West. So powerful are his ideas that we tend to think as Freudians without even knowing it.

If you believe your personality was formed largely because of how you were parented early in life, you can write Freud a thank you note (Cohen, 1999; Hamer & Copeland, 1998; Harris, 1998). Despite the influence of his ideas, however, some have argued that his perspective is so flawed that we should no longer teach it in psychology courses (Macmillan, 1991), although others believe we should tread more lightly with those kinds of assertions and recognize the value in his viewpoint (Westen, 1998).

Psychoanalytic theory adopts four assumptions about human personality: (a) that much of our basic inclinations are driven by primitive biologically based instincts of sex (Eros) and aggression (Thanatos); (b) that all behavior is unconsciously determined; (c) that early childhood experiences are primary in shaping who we are; and (d) that intrapsychic conflict characterizes the human psyche. This intrapsychic conflict is generated by the constant interaction among the id, ego, and superego, three so-called structures or agencies of personality that evolve over time during the stages of psychosexual development. The ego, the mediator among the demands of the id, superego, and reality, demonstrates psychological maturity to the extent that it can adequately manage and balance all these oftenconflicting demands.

The scope of Freud's vision and the power of his personality spawned theoretical offshoots including Jung's Analytical Psychology and Adler's Individual Psychology, as well as a number of neo-psychoanalytic and objects relations theorists such as Erik Erikson (1963), Erich Fromm (1973), Melanie Klein (1964), D. W. Winnicott (1965), and others. All these theorists retained some core elements of Freud's thinking, but modified other ideas to extend the original psychoanalytic formulation.

#### The Behavioral Perspective

The chief architect of the behavioral approach was B. F. Skinner (1938), who developed his ideas beginning in the 1930s in America, to counter what he regarded as the mentalism and non-scientific nature of Freud's perspective. Elegant in its parsimony, Skinner's radical operant conditioning approach rejected non-observable explanations for behavior. The person, for Skinner, is a complex organism behaving in lawful ways. The task of the psychologist is to use the methods of experimental analysis to determine the general laws of behavior, which take the form of contingencies of reinforcement and punishment. Whereas Freud embraced a determinism rooted in the unobservable dynamics of the unconscious, Skinner adopted an environmental determinism—behavior is lawful (i.e., not random) and the causes of behavior are directly observable and located in the external environment of the behaving person. Internal explanations for behavior, Skinner believed, were explanatory or redundant fictions and only served to impair our ability to predict future behavior (Skinner, 1953, 1974). Skinner did not reject the existence of

subjective experience or internal states, as is sometimes believed (Debell & Harless, 1992). Instead, he discarded the use of these as causal explanations of behavior.

Like Freud, Skinner's theoretical viewpoint produced a number of derivative perspectives. In general, these perspectives adhered to Skinner's scientific approach, although these new developments began once again to look inside the person for causal explanations. These newer perspectives therefore initiated a scientific study of the role of cognition in shaping personality, a movement that Skinner thought was wrong-headed until the time of his death in 1990 (Skinner, 1990). I will return to this discussion after we consider the Humanistic-Existential point of view.

#### The Humanistic-Existential Perspective

The personality theorists in this tradition rejected both the unconscious determinism of psychoanalysts and the environmental determinism of behaviorists. Instead, theorists like Carl Rogers (1942, 1951, 1957) and Abraham Maslow (1968/1999, 1971) emphasized the freedom of persons to construct their own personalities and in so doing to be responsible for the life they pursue. Emphasizing psychological health and well-being, Rogers and Maslow helped lay the foundation for the contemporary positive psychology movement (Seligman & Csikszentmihalyi, 2000). In his relatively complex theory, Rogers asserted that conditions of worth in the family of origin could deform authentic personality development. Overcoming these limitations would allow the person to become more fully functioning and healthy (Rogers, 1951). Less complex in his theoretical formulations, Maslow nevertheless made important contributions to our understanding of healthy personality development in the form of self-actualization and the experience of a fulfilling, vibrant life. Rollo May (1953) and Viktor Frankl (1959) were theorists who shared a somewhat similar approach to Rogers and Maslow, although their body of work is not as comprehensive.

### The Cognitive Perspective

The family of cognitive theories shares the conviction that inner states such as beliefs, expectations, emotional arousal, and any number of mental events are viable avenues for investigation, as long as these constructs are studied with the methods of science. Thus, these approaches share with Skinner an empirical methodology, although they widen the range of appropriate subject matter. Inner states, for these theorists, are important dimensions of personality, in terms of personality structure, development, and change. The Personal Construct Theory of George Kelly (1955) was foundational to work in this area, although Albert Bandura's Social Cognitive Theory (1965, 1977, 1986) and its variations (1997, 2006)

are better known and more influential. From the cognitive perspective, personality is seen as a complex, organized, and predictable system of cognitive structures. These structures, which develop over time, drive behavior; they are also reciprocally determined *by* behavior as well as by environmental forces.

#### Types, Traits, and the Biological Underpinnings of Personality

This approach to understanding personality is one of the oldest traditions in the West and at the same time enjoys extreme popularity in the present. A diverse set of perspectives, these approaches all tend to value the biological underpinnings of personality, made more possible today by methods of modern neuroscience, and tend to see the essential components of personality as either traits (individual characteristics or dispositions) or types (broad categories of persons). Traits and types help account for individual differences in personality. The Type A personality pattern (Friedman & Rosenman, 1974) is a well-known example of the latter. Many of the theorists in this domain have used a powerful statistical approach known as factor analysis to aid their understanding of the structure of personality. Researchers and theorists such as Raymond Cattell (1952, 1965), Hans Eysenck (1967), and more recently McCrea and Costa (1987), have all made important contributions in this domain.

McCrae and Costa's Big Five, Five Robust Factors, or Supertrait theory (neuroticism, extraversion, openness, agreeableness, and conscientiousness) enjoys particular popularity in contemporary psychology. From the vantage point of this perspective, personality consists of a pattern of traits of varying strengths, with a healthy dose of biological determinism (see Chapter 33, in this volume).

Big Five theorists assert that these supertraits are independent of one another and describe personality structure across cultures. However, evidence suggests there may be differences in relative strength across cultures and sex differences within cultures (Paunonen, 2003), or that the five-factor solution may not be a perfect match for all cultures (Xinyue, Saucier, Gao, & Liu, 2009).

### Summary

There are several important themes in the preceding discussion that I would like to highlight and that will provide a contrast for the material to follow. First, all the Western perspectives, with the exception of a behavioral viewpoint, assume an independent actor who initiates action, an autonomous identity, so to speak, whether the actor consists of an agency such as an ego or a constellation of independent traits. Second, with the exception of trait and type approaches, the dominant Western theories typically find families as a primary source of psychopathology in individuals. Families are seen to disrupt and distort personality

development, leading to any number of personal ills. Whether through unresolved intrapsychic conflicts originating in parent–child interactions, conditions of worth, narcissistic parents, or maladaptive contingencies of reinforcement, families are often construed as places from which one needs to escape in order to become fully functioning.

# Two Eastern Approaches to Understanding Personality

Having reviewed some of the major ideas in the dominant Western theories of personality, I now consider two important traditions for understanding personality that have evolved over the past 2,500 years in Asia. As mentioned previously, these two approaches are the Confucian and the Buddhist traditions. Obviously, it is difficult to do justice to these two traditions in only a few pages, just as doing so is problematic when discussing the Western perspectives. However, the danger is probably even more acute when discussing Confucianism or Buddhism because we may carry stereotypes and inaccuracies about what these approaches represent. Regarding Confucianism, for example, in the West, exposure to these ideas may run no deeper than someone having opened a fortune cookie to read the phase, "Confucius say ... [fill in the aphorism]." Compounding the problem, Confucianism is often seen as antiquated, feudalistic, coercive, and paternalistic (Littlejohn, 2009; Rosemont & Ames, 2009), although the so-called New Confucianism (Bell, 2008; Makeham, 2003) is reviving Confucian ideas in a way that is more relevant to contemporary thinking. With the continued economic rise of China, there is a renewal of interest in Confucian ideals and values not only within the Chinese government, but also among the Chinese population, a phenomenon that has been carefully documented by Billioud and Thoraval (2014).

Similar problems arise when we discuss Buddhism. Unfortunately, our notions of Buddhism (and other Eastern philosophies) have often been shaped by an emphasis on rather arcane and exotic notions of altered states of consciousness (Tart, 1990; White, 1972), rather than on how Buddhist ideas might inform a more commonplace understanding of the shaping of human character and personality (Brazier, 2002), the enhancement of personal relationships (Beck, 1989), or a healthier experience of everyday life (Kabat-Zinn, 1994).

When reading this section of the chapter, please keep in mind too that these Eastern traditions have evolved over a span of time millennia longer than Western approaches. In addition, these perspectives have undergone significant development as they encountered and were assimilated into other cultures. As Buddhism migrated, for example, from India to China, it took on distinctive characteristics in the structure of Chan Buddhism (Herschock, 2004), which then evolved into Zen in Japan (Kasulis, 1981). And of course, Zen changed again much later as it

immigrated to the United States, via writers such as Alan Watts (1957) or Shunryu Suzuki (1970). Further still, the contemporary interest in mindfulness reflects the American penchant for pragmatic applications of these ideas (Harris, 2014; Kabat-Zinn, 1994). The modification of ideas in this way is not uncommon. In a similar fashion, psychoanalytic ideas have evolved significantly over the last century, as they crossed the Atlantic to the U.S.

#### Confucianism as Personality Theory

The primary architect of Confucian thought is obviously Confucius (551–479 BCE), whose *Analects* (Ames & Rosemont Jr., 1998) expressed the central ideas of Confucianism. By way of background and for the reader interested in exploring the Confucian tradition in greater depth, *The Analects of Confucius* is considered one of the "Four Books" (i.e., canonical material) of Confucianism, with the other three being the *Zhongyong*, the *Da Xue*, and the *Mencius*. Although Confucianism is typically described as a system of philosophy, religion, or political thought (Bell, 2008), I believe this tradition can also be understood as a theory of personality, a point I made earlier in this chapter. To review, I make this assertion because the Confucian tradition shares five important characteristics with Western theories of personality—it posits basic elements or agencies of personality, presents ideas for how personality develops, offers explanations for why people suffer, suggests activities for alleviating suffering, and presents a model for the mature and mentally healthy personality.

As with any Western theory, Confucianism works with each of these five elements to a greater or lesser degree; some are fully developed and others less so. One cannot dismiss the idea that Confucianism is a personality theory because, for example, it does not do a very good job of describing activities to alleviate mental suffering. We could level this same criticism at trait or factor analytic approaches to personality, and yet we would not question their status as viable Western models. My contention is that *in addition to* understanding Confucianism as a philosophical, religious, or political system of thought, we may also view it as an explanation of how personalities develop, change, and reach optimal functioning.

Henry Rosemont and Roger Ames, two leading Asian scholars and philosophers by training, make assertions that sound remarkably like personality theorists. For example, in their important translation and interpretation of the Xiaojing, *The Chinese Classic of Family Reverence* (Rosemont & Ames, 2009), they contend that "The family is where much of our personality develops and continues to develop even after we mature and become parents ourselves" (p. 4). In a similar vein, they aver that reading the Xiaojing "can thus serve as a mirror of our own family past, helping us to reflect on how and why we have become who we are, on whom we are becoming, and on how we might become better" (p. 4).

Such discourse clearly fits within the tradition of personality theorizing. If you did not know these statements pertained to Confucianism, it would be difficult to distinguish them from any number of Western personality theories.

To consider Confucianism in more depth, let's start at the end point of personality development. A central and perennial question asked in the Confucian tradition is how a person becomes consummately human (Ames, 2011). This question takes us to the heart of the Confucian understanding of persons; the answer presents a clear contrast to typical Western approaches and a nice connection to positive psychology concerns. One becomes an exceptional human or an exemplary person by dedication to a path of *fulfilling one's interpersonal roles and responsibilities*. In other words, one becomes consummately human only in relationship with others, and in particular in one's immediate and extended families (Ames, 2011; Rosemont & Ames, 2009).

On the face of it, this idea seems simple and straightforward, and yet it is a markedly different perspective than that adopted by many Western personality theorists. As I discussed previously, in Western perspectives the family is often portrayed as a primary source of emotional suffering and psychopathology. We must break free of our families, these traditions assert, to demonstrate our maturity and to develop our individual identities. In the Freudian tradition, we have blamed parents, particularly mothers, for significant individual suffering. The schizophrenogenic mother (Fromm-Reichmann, 1948) and the refrigerator mother (Bettleheim, 1967; Kanner, 1949) are two noteworthy but tragic examples of how parents have been causally linked to significant psychopathology, schizophrenia in the former case and autism in the latter. And more contemporary object relations theorists, such as Alice Miller (1981), blame the family crucible for the deformed psychological lives of their children. Equally damning to the family is Rogers' (1951) perspective that families of origin create conditions of worth, which stunt the psychological growth of their members, particularly children.

The view of family-as-toxic is a potential outgrowth of construing persons as autonomous and independent, which may also be tied to the industrial revolution and the rise of consumerism and individualism so prevalent in the West in general and in America in particular (Cushman, 1995). One of the primary tasks of budding adulthood, Westerners tend to believe, is that we must separate from our families in order to "grow up" and become our own independent selves. This idea permeates our culture to such a degree that it is difficult to see things in any other way. But this notion of family and individual independence is alien to a Confucian point of view and therefore would be seen as foreign to an understanding of how a person should mature, especially if that person is to evolve into an exemplar of psychological health and well-being (Ames, 2011; Rosemont & Ames, 2009).

The essential idea when understanding personality within the Confucian tradition is that human beings or, better put, human becomings (Ames, 2011; Giordano, 2015) are fundamentally relationally defined—we develop our identities to the extent that we fulfill our role expectations in our immediate and extended families

and in the broader social community. Personalities mature as they fulfill these roles in wider and wider concentric circles of relationship (Tu, 1994). Personality development, therefore, is always a communal affair. Personality is a dynamic system (Giordano, 2017), always changing as the relational contexts of our lives change. The person I am today evolves as a function of how my relationships change, as I get married, divorced or widowed, as I become a parent or grandparent, or as I move into and out of employment positions (Rosemont, 1997). In a concrete sense, therefore, personality is never fixed; it is fluid and dynamic, a theoretical idea in psychology that is hardly new (cf. Dewey, 1922; Mead, 1934).

A number of important implications of this theoretical perspective are evident. First, from this viewpoint, it makes little sense to construe the person as an independent, autonomous self. These are not roles one plays; negotiating and fulfilling these roles and responsibilities make one *who one is* (Rosemont, 1997). When lived with maturity, these roles are not something one fulfills out of duty merely to please others (e.g., parents, employers), but out of an intrinsic motivation to attend to and fulfill communal needs. Nor does it make sense to speak in terms of psychological well-being as an independent project, a venture one undertakes alone, even with the help of a therapist. Psychological well-being is inextricably bound to social relationships.

Consider too the idea of self-description. I might describe myself in the following manner: I am a middle-aged man, who has a wife and two sons, and who teaches students in a university setting. Such a description locates my identity as separate from ("I have a wife and two sons") the important persons in my life. An alternative description, and one that would be more true to a Confucian appreciation of personality, would be as follows: I am a middle-aged man, the son of two elderly parents (one of whom recently passed away), the husband of my wife, the father of two boys, the teacher of my students, and so on. This latter description underscores the centrality of the relationships in my life. Indeed, "I" exist not as an autonomous self; rather "I" exist in between all these relationships. I am these relationships and I change (my personality changes) as the configuration of these relationships evolves in developmental time. To say that I have a son who is going off to college, thus creating an "empty nest," misses the important nuance that my personality will reconfigure as the relationship with my son changes, as will the relationship with my wife, as will the relationship with my other son. In terms of mature personality development, I become an exemplary person and exhibit consummate behavior to the extent that I adequately fulfill the responsibilities of all these relationships, starting at home and working outward, in what Tu Wei-ming (1994) has elegantly called the "ceaseless process of human flourishing" (p. 183).

But how does one fulfill these relational expectations to the highest degree so as to become an exemplary person, which is after all a central concern of Confucian thought? Confucians acknowledge that we do come into the world with a certain

set of inclinations and proclivities, certain dispositions if you will, but we must change and develop through years of self-conscious effort (Tu, 1994). Invoking both nature and nurture, Rosemont and Ames (2009) suggested,

In a Confucian world, because persons are born into family relations that are considered constitutive of their persons, their 'natures,' or perhaps better, 'natural tendencies,' are a combination of native instinct and the cultivated cognitive, moral, aesthetic, religious sensibilities provided by their family locus and initial conditions. (p. 41)

Thus, the Confucian approach to personality change is action- and results-oriented. Self-conscious effort is the key. In Confucianism, one must "walk the walk" (i.e., talk is cheap), not just read, write, or speculate about these inspiring ideals (Bell, 2008). Persons become exemplary through ongoing efforts, first, within the family context and then expanding outward to fulfill adequately the roles that constitute personal identity. In this discussion, I have emphasized relationships among family members, something that is consistent with the "five relationships" highlighted in the Confucian tradition: father-son, husbandwife, elder brother-younger brother, ruler-subject, and friend-friend (Rosemont & Ames, 2009). The latter two relationships, of course, point us outside the immediate family and also suggest that, although these five relationships are central in traditional Confucianism, the communal context of living *in all its variations* is the foundational idea.

Moreover, because families are no more separate and independent than individuals (i.e., families themselves are embedded in a social context), families are responsible to other families in the ever-widening relational concentric circles that I mention above. Personality dysfunction results to the extent that one does not fulfill these roles and responsibilities. If such dysfunction occurs, it is the responsibility of the social network to bring the person back into harmonious relationships. Persons do not flourish or suffer in isolation. If one person suffers, so do others. Thus, psychological health and well-being are the responsibility of all persons in the social network, in this case, the family.

In my discussion thus far, I have avoided a principal criticism of traditional Confucianism—that it advocates a strict hierarchy in the structure of relationships. The hierarchy exists to ensure that roles are adequately understood and carried out. Indeed, the Chinese terms used to describe these relationships indicate there are those who are above (superior) and those who are below (inferior), as in the father is "above" the son or the man is "above" the woman (Rosemont & Ames, 2009). Given the space constraints of this chapter, I will not discuss this important issue at length. I refer the interested reader to the excellent discussion by Rosemont and Ames, who are careful to point out that the terms typically translated as "above" and "below" may also be read to indicate "benefactor" and "beneficiary,"

that the structure of these relationships has never implied blind obedience on the part of the beneficiary, that elitism is not a necessary byproduct of hierarchy, and that benefactor-beneficiary hierarchies are ever-shifting, as when I help a friend and a week later she helps me. Nor does it follow, as Rosemont and Ames revealed, that coercion and oppression are necessary components of hierarchy. A young person may derive wonderful fulfillment by learning to defer to and care for his grand-parent, for example. Finally, despite stereotypes to the contrary, many of the great Confucian thinkers, including Confucius himself, have been vociferous critics of the status quo (Bell, 2008). Why not continue this tradition as our understanding of Confucianism continues to evolve?

To sum, the Confucian approach to personal development, change, and mental well-being can be understood as a theory of personality in the same way that the ideas of Freud, Rogers, and others are viewed. The notion of the relational self and Confucian role ethics (Ames, 2011), however, run against the typical Western idea of the autonomous actor, the one who must break free of the restrictions of family (or other social structures), so as to "stand on one's own two feet" and develop into maturity.

Despite the divergence from a typically Western approach, I hope you can sense also that there are points at which Confucian ideas intersect with Western ways of thinking. For example, there are recent developments in Western psychology in the psychotherapeutic literature and in treatments of male and female psychology in which the relational self is highlighted, although the Confucian tradition is not part of the discussion (Jordan, 2002; Levant & Pollack, 1995; Miller & Stiver, 1997). It is also true that the concept of the relationally defined self in Confucianism overlaps with aspects of Triandis's (1989) notions of the private self and the collective self.

## A word on self-structure in Confucianism and Buddhism

This is a good place to pause and consider an issue that is embedded in the foregoing discussion, although I have dealt with it only briefly. If the self (i.e., the core of personality) is relationally constructed, then is it possible for the self to be an independent, fixed (stable) entity? Isn't the relational self undergoing constant change as the person moves into and out of various relationships, even during the course of a day? If so, then isn't the self more dynamic than a stable state would suggest? These are important questions that point to the *ontological foundations* of self-construal. Ontology is a branch of philosophy that investigates and asks questions about the nature of being. What are the fundamental characteristics of things that exist? If we ask questions about the essential qualities of the self, these are ontological questions. For example, is it best to understand the self as a stable essence or is it more appropriate to interpret the self as dynamic and fluid? Classical Greek philosophers emphasized a Being ontology—a perspective that has shaped the thinking of much of the Western world, including our self-understanding. As a result, many of the Western personality theories I review in the first part of

this chapter construe human personality as consisting of stable, relatively fixed entities: id, ego, superego (so-called "structures" in psychoanalytic theory), traits, dispositions, or the independent self (Markus & Kitayama, 1991, 2010).

But the foregoing discussion of Confucianism should make it clear that the ontological foundations of the self in this context do not constitute a Being perspective. In contrast, the historical ontological tradition in the East has emphasized a Becoming ontology (Ames, 2011), a viewpoint that, instead of emphasizing stable and fixed structures, sees the world (including selves) as dynamic, changing, unstable, impermanent, and always in process. In this philosophical context, the self as relationally defined makes perfect sense. Ontologically, the self is not a fixed essence; rather, it is unstable and dynamic, or at least is *should be*, if the person is appropriately responsive to his or her environmental conditions. Below, we will see that this ontological tradition is also foundational to a Buddhist understanding of human personality. If you are interested in a deeper discussion of these ontological issues is personality theory, I have written about them elsewhere (Giordano, 2014, 2015, 2017, in press). Any of Roger Ames' books are excellent resources as well.

#### **Buddhism as Personality Theory**

In contrast to Confucianism, which has not had much dialog with Western psychology, Buddhism has a longer and more extensive history of interaction with the West, dating at least to William James in the early twentieth century (Michalon, 2001). However, it was Carl Jung and his speculations on Eastern thought, including Buddhism, who generated more interest by publishing a number of essays using Eastern ideas to illustrate some of the principles of Analytical Psychology (Jung, 1963a, 1963b). Unfortunately, despite the interest in Eastern ideas that Jung's perspective engendered, his conjectures have been perceived as mystical, an issue that created distance between Jung and other, more scientifically oriented, personality psychologists.

In recent decades, however, partly in response to the positive psychology movement and to greater global interconnectedness, there has been a renewed interest in a rapprochement between Buddhism and Western scientific psychology. Some of this interest is observed in empirical studies of Buddhist (and other) meditative strategies (Shapiro & Carlson, 2009; Walsh & Shapiro, 2006) and in applications of Buddhist psychology to remedy dysfunctional behavioral patterns such as anxiety disorders (Toneatto, 2002), substance abuse problems and other addictive behaviors (Marlatt, 2002), HIV risk behaviors in drug-using populations (Avants & Margolin, 2004), and as an approach to alleviating grief reactions (Michalon, 2001).

Note in the previous paragraph that I used the term Buddhist *psychology*. Although Buddhism is typically thought of as a religion or philosophy, recent psychological explorations into Buddhist thought have underscored the connections

between Buddhist beliefs and ideas in the discourse of contemporary scientific Western psychology (Dahlsgaard, Peterson, & Seligman, 2005; Wallace & Shapiro, 2006; Walsh & Shapiro, 2006). For this chapter, whose purpose is to understand Buddhism as a theory of personality, I will emphasize the degree to which Buddhism shares characteristics with Western approaches. I should note that aspects of Buddhist thought emphasize meditation-induced higher states of consciousness, similar to ideas presented by James (1902/1958), Jung (1963b), or Maslow (1968/1999, 1970, 1971). Although these states of consciousness are important in Buddhist thought and practice, my emphasis will be on Buddhist formulations of what human cognition and personality are like, how mental suffering arises, and on the steps we can take to alter our personalities to lead to more fulfilling, mentally healthy lives.

The Buddhist tradition is remarkably complex, as it has evolved over time and in geographic expansion and assimilation into a variety of cultures. It is sometimes described as the *Middle Way* because it eschews the extremes of either self-indulgence or self-mortification. Buddhism derives its name from its founder, the Buddha or enlightened one, who lived and taught in northern India at roughly the same time as Confucius (probably 563–483 BCE). Siddhartha Gautama, the Buddha's given name, left his wife and son and a life of relative luxury at the age of 29 to pursue an understanding of the nature of suffering and its cure (Edwards, 1972). Today Buddhism is commonly classified into three main schools—Theraveda Buddhism in Southeast Asia, Mahayana Buddhism in East Asia, and Vajrayana Buddhism in the Indo-Tibetan region (Edwards, 1972; Wallace & Shapiro, 2006).

Buddhism is often regarded as the most psychological of the Eastern systems of thought (Wallace & Shapiro, 2006) or as offering the world's first psychology textbooks (Brazier, 2002). As we discuss a Buddhist conception of personality, the ideas I present are necessarily general and leave out important differences between the various schools of Buddhism. It is fair to say, however, that the principles I outline capture the essence of Buddhist psychology. As I indicated above, I will emphasize the practical, everyday challenge of personality and character development in Buddhist theory, rather than the more esoteric notions of metaphysics or states of consciousness. These latter two aspects of Buddhism are important to greater or lesser degrees in the various Buddhist traditions, but they are less germane to the topic of this chapter. They are also less important to many people practicing Buddhism as a means of self-improvement or enhanced mental well-being. In adopting this strategy, I clearly short-change, if not short-circuit, important elements of Buddhism, a problem that has been clearly articulated by Sugamura et al. (2007).

The *essence* of Buddhist teachings is said to reside in a talk the Buddha gave a short time after his enlightenment, his awakening to a more authentic way of life. The talk, known as the *Setting in Motion of the Wheel of the Dharma*, outlined the Four Noble Truths, which are the foundational ideas in Buddhism. In the description that follows, I rely heavily, though not exclusively, on Brazier (2002),

who acknowledged that some Buddhists might strongly disagree with his rendering of these ideas. The usefulness of Brazier's analysis for our purposes, however, is that it highlights the psychological dimensions of Buddhist thinking.

The Four Noble Truths are as follows:

*Dukkha* (from the Sanskrit): Affliction—is a fact of life. It is real. Suffering is often a term used instead of affliction. This suffering can be mental as much as physical.

Samudaya: Arising—in this world of affliction, something arises within us. Feelings arise in response to the affliction. These feelings are real and they often take the form of desiring things to be other than the way they are. For example, we may believe that some pleasurable activity or object can relieve our suffering and bring satisfaction. In fact, the activity or object does not bring satisfaction; it is the temporary lack of desire that is the source of satisfaction, not the thing itself (Levine, 1979). In a short time, the desire returns.

*Nirodha*—Containment—what arises in us can be contained. We can harness or control these feelings. They can then become the fuel for personal transformation.

*Marga*—Path or track—characteristics of a constructive, authentic life. This Fourth Noble Truth consists of the Eightfold Path (the Middle Way), which leads to a fulfilled life.

The Eightfold path consists of:

Right View (understanding)—listening and seeing deeply.

Right Thought—keeping in mind the thought of a higher purpose, leading to greater compassion.

Right Speech—speak in ways that inspire.

Right Action—begins with self-restraint. Do good for others.

Right Livelihood—not just a question of doing the right job, but always keeping in mind what the job is and doing it for the good of others.

Right Effort—becoming aware of the feelings that arise in us in response to affliction.

Right Mindfulness—living in the present moment, recollecting always the true purpose of life.

Right Samadhi (concentration or rapture)—the highest understanding of the purpose of life. A *cultivated* state of mind that "naturally finds the bliss in all the eventualities of everyday life and so enables us to fulfill our purpose in being alive" (Brazier, 2002, pp. 182–183).

In a sense, the first two aspects of the Eightfold Path reflect early efforts in the life of the developing person who is working toward psychological maturity, the next three are ethical requirements for mature behavior, and the latter three pertain to meditative techniques designed to enhance personal development (Edwards, 1972). Properly understood, the Eightfold Path should not be seen as a linear eight-step

process to enlightenment. In a sense, there are many paths to maturity, and what works well for one person may not be the path for another. A Buddhist teacher cannot directly enlighten the student, but instead points the way toward an authentic life. This notion is reflected in the Buddhist aphorism that your path in life is to find your path in life.

Considered as a whole, the Four Noble Truths (the Eightfold Path constitutes the Fourth Noble Truth) describe the central problem of existence and the strategies for leading a noble life of mature character. We all will experience affliction and suffering. How we respond to it defines who we are. The task of the developing person is, through sustained effort and practice, to transcend one's own circumstances so as to live a life of doing good for others.

The Buddhist framework, however, presents a very real problem for Western thought, a problem I have already identified. Who is the developing person? What constitutes this individual identity? As with Confucianism, the self is not a separate, independent actor. In fact, the sense of self as separate or autonomous is a central form of psychopathology (suffering) in this tradition. Brazier (2002) de-emphasized this aspect of Buddhist thought. However, because many interpreters of Buddhism see it as important, we should work with the idea here.

The idea of an independent ego is one that creates mental suffering because it leads to self-focused pleasure-seeking, fear, greed, loneliness, pride, conceit, and a host of other negative feelings or experiences. Buddhism teaches that the idea of a separate self, a "center" of personality, is merely an illusion created by our ongoing experience. What we experience as our "self" is really an impermanent and everchanging series of thoughts, emotions, sensations, impulses, and so on (Mosig, 2006). Also of relevance and to further complicate our understanding of personal identity is the Buddhist concept of independent co-origination or the idea that all things can be understood only in relation to all other things (Sugamura et al., 2007). Things do not exist in and of themselves. It makes little sense, therefore, to consider personal selves as separate or independent. Persons can only be defined in relation to other persons, an idea akin to the Confucian relational self. Construing the person in this way brings us full circle to Brazier's (2002) emphasis on living a life in service to others—by caring for others, I care for myself, because I exist only in terms of my relationships. The quality of my life derives from the quality of these relations.

Where then does this discussion leave us in terms of a Buddhist understanding of personality? Clearly, this conceptualization differs from dominant Western approaches when considering personal identity and personality development. The Buddhist tradition underscores the inevitability of suffering (both physical and mental) and how we might construct our lives and, through disciplined practice (typically strategies of mental training in meditation), arrive at a more fulfilling, noble, and other-centered existence. Thankfully, Western scientific psychology is taking these ideas seriously and is in the midst of extensive empirical investigation into the processes and outcomes of mindfulness and other meditation strategies, practices that are designed to reduce self-focus and improve mental well-being and personality functioning (see Shapiro & Carlson, 2009).

#### Conclusion

In this chapter, I have briefly reviewed the dominant Western theories of personality and have proposed that Confucianism and Buddhism, although traditionally viewed as religions or philosophies, may also be understood as theories of personality. I make this assertion because they share important dimensions of Western theories, including describing basic elements of personality, presenting ideas for how personality develops, offering explanations for why people suffer, suggesting activities for alleviating suffering, and proposing a model of the mature and mentally healthy person. As a Westerner, it may be difficult to assimilate these approaches into existing schemas because they are in some ways alien to a Western way of conceptualizing persons and personalities.

We might therefore ask if we can authentically adopt these ways of thinking. Bell (2008), who is not Chinese but lived in China for many years, worked with this question in his playful yet serious discussion of his own grappling with this issue. How much of a Confucian could he be, Bell asked? Can any of us who were not born into the Confucian tradition really think and behave and construct our lives in these ways? From a different perspective, Michalon (2001) concluded that, although he does not consider himself a Buddhist, he benefitted greatly from the practice of Buddhist meditation. He poignantly shared the story of the accidental death of his only child and how Buddhist meditation helped him cope with the profound grief of this experience.

Michalon (2001) and Bell (2008) may have something to teach us. Although we may not be Confucians or Buddhists, perhaps we can profit from these powerful ideas as we construct our own lives and become intentional in how we develop our personalities. After all, both Confucianism and Buddhism address the same "big potato" questions (Monte, 1999) of human existence and personality construction as do the grand Western theories. I leave it to you, the reader, to explore these Eastern perspectives more fully and to decide their utility in understanding both others and yourself.

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# The Five-Factor Model Contemporary Personality Theory

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### Introduction

Many personality theories have emerged in the history of psychology. These theories differ significantly, sometimes crucially, in their views on the nature of human personality. For example, there are important differences in terms of such polar basic assumptions as freedom—determinism, holism—elementarism, constitutionalism—environmentalism, and homeostasis—heterostasis (Hjelle & Ziegler, 1992). In this regard, the problem of personality can be seen as one of the most complex, yet at the same time most interesting, issues and research areas in psychology. Traditionally, the common belief is that one of the first personality theories in Western psychology was created by Sigmund Freud in the early twentieth century, and further developed within the framework of the psychodynamic approach, post-Freudianism, ego psychology (in the work, e.g., of Jung, Adler, Fromm, and Erikson). However, the peak of personality science is associated with the second half of the twentieth century and the beginning of the twenty-first century. The preface to the APA Handbook of Personality and Social Psychology, Volume 4: Personality Processes and Individual Differences states that "The field of personality science has evolved rapidly in the past 25 years ..., [and] has matured as a science, growing in prominence, recognition, and respectability (perhaps more outside of psychology than within) since the early 1990s" (Mikulincer, Shaver, Cooper, & Larsen, 2015, p. xxiii).

In recent years, more attention has been paid to the Eastern traditions of addressing the personality issue, for example, in Buddhism and Confucianism (see Chapter 32 in this volume). Moreover, on the basis of the revealed

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intercultural variations in the notions of human nature, indigenous concepts of personality have developed in recent decades. Their authors emphasize that existing theories of personality—the product of Western society scientific traditions do not reflect the essence of personality of people living in other parts of the world (Ho, 1998; Stefanenko, 2009). As a response to this movement, personality theories by African authors appeared in the 1960s and 1970s, suggesting the existence of a distinct African personality, the most famous being the concept of the African personality created by the Senegalese psychiatrist Ibrahim Sow and based on ethnographic data (Berry, Poortinga, Segall, & Dasen, 2002; Sow, 1977). Cheung, Cheung, Wada, and Zhang (2003) reported that the most active movements of indigenous psychology are found in Asian countries: India, China, the Philippines, Korea, Japan, and Taiwan. Asian psychologists consider it necessary not only to identify unique constructs relevant to their cultural experiences (the Chinese concepts of harmony and face; the Japanese concept of amae (sweet indulgence); the Korean concept of chong) and to include it in indigenous personality theories, but also to develop special indigenous measures of personality assessment (Cheung et al., 2003). The strength of the indigenous concepts is that they enable understanding of aspects of personality that are implicit for a particular culture. However, these concepts do not seek to reveal the universal laws of the human psyche free from the influence of culture, and thus do not correspond to the universalist direction that dominates in modern psychology (Stefanenko, 2009).

It can also be noted that the problem of personality and related concepts (temperament, character, subject) has traditionally been central in Russian (formerly Soviet) psychology since the beginning of the twentieth century (Krupnov, Novikova, & Vorobyeva, 2016). The development of personality, its components, its relationship with other psychological, physiological, and biological phenomena (activity, consciousness, properties of the nervous system, organism, and physique) were discussed in the works of Lev S. Vygotsky, Alexey L. Leontiev, Sergey L. Rubinstein, Boris M. Teplov, Boris G. Ananyev, and many others. In the Soviet period, in particular, the USSR scientists compared approaches to the study of personality in Russian and Western science, and often criticized Western concepts from the point of view of Marxist philosophy and—in some cases—communist ideology. However, these works did not deal with the indigenous personality (Russian or Soviet) but instead emphasized the leading role of social factors and activities in personality development (see, e.g., Leontiev, 1978/2009; Vygotsky, 1978). There were many problems in the development of Russian psychology in general, and the psychology of personality and cross-cultural psychology in particular, until the late 1980s (Chebotareva & Novikova, 2013). Since the end of the twentieth century, Russian psychologists have been actively interacting with Western colleagues and adapting Western psychological theories, methodologies, and techniques in Russia.

Thus, in the present period of globalization, two contrary trends in the development of personality theories can be identified. On the one hand, many theories that have arisen in Western psychology are becoming more widespread and empirically validated in different countries and cultures; on the other hand, there is a growing interest in traditions that consider a person outside the context of Western civilization and the emergence of indigenous concepts of personality.

In this chapter, we will consider one of the contemporary personality theories, the so-called *Five-Factor Theory* (FFT) *of Personality* that is based on the *Five-Factor Model* (FFM) *of Personality*. This theory is of particular interest for discussion in a cross-cultural context due to a number of circumstances:

- 1 Although this theory was created relatively recently, it embodies some of the ideas that are characteristic of earlier views of personality (as psyche or human soul).
- This theory and approach to the study of personality are among the most widely spread theories in Western psychology in recent decades.
- At the same time, it was this model of personality that was, with certain variations, later identified in different countries and cultures (in different parts of the world), and it has been the basis of a massive amount of cross-cultural research.

# A Brief History of FFM and FFT Development

The FFM is one of the many variations of personality trait theories (also called dispositional theory). Trait theory has been the major paradigm in the study of personality in European and American psychology since the beginning of the twentieth century (Buss, 1989; McCrae & John, 1992; Thomae, 1989). Personality traits can be defined as habitual patterns of human behavior, thought, and emotion that are manifested in a wide range of situations (Novikova, 2013b). One of the pioneers in the study of personality traits (disposition) was Gordon Allport, who believed that the identity of each person should be described by a set of 5–10 individual traits (the "central dispositions"; Allport, 1937).

The main goal of trait theories is to discover the basic dimensions of personality, and one of the principal questions for these theories is the number of the dimensions because, as Allport and Odbert (1936) showed, there are more than 4,500 trait names in the English language. The solution to these problems is largely determined by the use of different variants of factor analysis. For example, Raymond Cattell (Cattell, Eber, & Tatsuoka, 1970), using oblique factor analysis, developed a 16 Personality Factor Model that includes the following traits: (1) Warmth (A); (2) Reasoning (B); (3) Emotional Stability (C); (4) Dominance (E); (5) Liveliness (F); (6) Rule-Consciousness (G); (7) Social Boldness (H); (8) Sensitivity

(I); (9) Vigilance (L); (10) Abstractedness (M); (11) Privateness (N); (12) Apprehension (O); (13) Openness to Change (Q1); (14) Self-Reliance (Q2); (15) Perfectionism (Q3); (16) Tension (Q4). But Hans J. Eysenck, using orthogonal factor analysis, developed a hierarchical model of personality that includes three factors: (a) Extraversion/Introversion; (b) Neuroticism/Stability; (c) Psychoticism/Socialization (Eysenck, 1991; Eysenck & Eysenck, 1975). The Eysenck Personality Profiler (EPP) breaks down different facets of each trait considered in the model.

McCrae and John (1992) pointed out that there are two historical paths to the FFM—the lexical approach (i.e., the search for personality dimensions in the natural language) and analysis of personality questionnaires. These approaches differ in various ways, including differences in terms, the order of enumeration, and labelling (Roman numerals or letters) of factors.

The first steps to creating a FFM were taken within the lexical approach by Tupes and Christal (1961). To their surprise, they discovered only five recurring factors in eight different samples, which they named Surgency, Agreeableness, Dependability, Emotional Stability, and Culture. Norman (1963) replicated this study, confirming the existence of five similar factors, and numbering and naming them: I Extraversion or Surgency, II Agreeableness, III Conscientiousness, IV Emotional Stability, and V Culture. It is interesting that Cattell (1973) discovered five Second-Order or Global Factors: Extraversion, Independence / Accommodation, Self-Control, Anxiety, and Openness / Tough-mindedness, with a second-order factor analysis of 16 primary personality traits. Independently, Goldberg (1981, 1990) started his own lexical project, again finding five factors (Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Intellect), and later coining the term "Big Five" as a label for the factors (Goldberg, 1981, 1990).

Analysis of questionnaires as the second tradition that led to the modern FFM arose from the work of Eysenck, who identified Extraversion (E) and Neuroticism (N) as major components of psychological tests (McCrae & John, 1992). Costa and McCrae (1980) added a dimension they called Openness to Experience (O), and a measure known as the Neuroticism-Extroversion-Openness Inventory (NEO-I). Later they (Costa & McCrae, 1985, 1989) created scales to measure Agreeableness (A) and Conscientiousness (C). According to McCrae and John (1992, p. 180), "... if the advantage of the Norman numbers is their theoretical neutrality, the disadvantage is their low mnemonic value. Initials, originally popularized by H. J. Eysenck, are easier to interpret, and they may be less theoretically laden than full names."

Thus, McCrae and Costa (1987) proposed their variation of a FFM, which is an empirical conceptualization of the covariation of personality traits. They reported that, in examining the competing factorially analyzed personality trait theories of the day, they noticed more prominent concurrence on the level of the higher-order factors than on the level of the lower-order factors. In 1992, they published a Revised NEO (NEO-PI-R) (NEO Personality Inventory, Revised) manual which included six facets for each factor, that is, 30 in total (Costa & McCrae, 1992).

There are two forms for the NEO-PI-R, one for the self-report (form S) and one for observer rating (form R), both consisting of 240 items (descriptions of behavior) answered on a five-point scale. A slightly revised version, the NEO-PI-3, was developed to improve readability of the items (McCrae, Costa, & Martin, 2005). There is also a 60-item assessment of domains only, called the "NEO FFI" (NEO Five Factor Inventory) (Costa & McCrae, 1989, 1992).

Finally, at the very end of the twentieth century, McCrae and Costa (1996, 1999) postulated the FFT, which, in contrast to the FFM,

is an attempt to conceptualize recent findings about personality traits in the context of the development and operation of the whole personality system. FFT describes how biology and culture interact in the development of habits, attitudes, values, roles, and relationships, which express both the individual's traits and the press of the social environment. (Allik & McCrae, 2002, p. 303)

Now, we will discuss in more detail the FFM factors, the basic ideas of FFT, and their validation across cultures.

# The Five-Factor Model

The FFM suggests that all people, regardless of their gender, age, or culture, share the same basic traits, but differ in the degree of their manifestation. The FFM framework states that the factors (also referred to as "traits" or "domains") are orthogonal and each of them comprises six facets, which we describe below according to their labels and in the order as seen in NEO-PI-R (Costa & McCrae, 1992).

Neuroticism (N)—N1: Anxiety; N2: Angry Hostility; N3: Depression; N4: Self-Consciousness; N5: Impulsiveness; N6: Vulnerability. People who score high on N are emotionally sensitive; they become upset easily and frequently experience negative emotions. This pole of N also includes sadness, anger, anxiety, worry, self-consciousness, vulnerability to stress, and a tendency to act impulsively. People who score low on N are calm and emotionally stable and even under stressful conditions, they remain confident and experience few negative emotions.

Extraversion (E)—E1: Warmth; E2: Gregariousness; E3: Assertiveness; E4: Activity; E5: Excitement Seeking; E6: Positive Emotions. People who score high on *E* are warm, talkative, assertive, active, and full of energy, cheerful and high in positive affect; they generally like to be around others and prefer stimulating environments. Introverted people, in contrast, like to be alone or with a few close friends; they are reserved and serious, value their independence, and prefer quiet environments.

Openness to experience (O)—O1: Fantasy; O2: Aesthetics; O3: Feelings; O4: Actions; O5: Ideas; O6: Values. People who score high on O are usually artistic, curious, imaginative, unique; they have wide interests, sensitivity to esthetic experiences and fantasy, as well as a rich emotional life. People who are low on O have a narrower set of interests and are more conventional in their outlook and behavior; they are closed to new ideas and also experience their emotions less intensely.

Agreeableness (A)—A1: Trust; A2: Straightforwardness; A3: Altruism; A4: Compliance; A5: Modesty; A6: Tender-Mindedness (the opposite pole is characterized by hostility, selfishness, lack of trust, etc.). People high in A are altruistic, cooperative, compassionate, appreciative, forgiving, generous, kind, sympathetic, and trust the good intentions of others. Disagreeable people, in contrast, tend to be characterized by antagonism, skepticism, and a competitive rather than cooperative take on life.

Conscientiousness (C)—C1: Competence; C2: Order; C3: Dutifulness; C4: Achievement Striving; C5: Self-Discipline; C6: Deliberation. Persons who have a high score on C strive to achieve high standards and are self-disciplined, orderly, deliberate, responsible, thorough, and dutiful. Low-conscientious persons rarely plan ahead; they may be careless and disorganized in personal matters, and often fail to establish a well-defined set of life goals.

As noted above, these factors (with some variations in their names, order, and labels) are included in different versions of FFMs (Cattell, 1973; Goldberg, 1981, 1990; John, 1990; Norman, 1963; Tupes & Christal, 1961). McCrae and Jones (1992) emphasized that among scientists the least controversial factor is N and the definition thereof, while the greatest controversy concerns O. It is also interesting that all trait models (not only the FFMs) include Extraversion vs. Introversion as one of the central dimensions of human personality (e.g., Briggs, 1989; Cattell et al., 1970; Eysenck, 1991; Goldberg, 1981, 1990; John, 1990; Jung, 1971; McCrae & Costa, 1987; Norman, 1963; Tupes & Christal, 1961). In addition, most factor models include a Neuroticism or Emotional Stability dimension. In fact, constructs that describe extraversion/introversion and neuroticism/emotional stability are found in ancient philosophy and the many psychological theories of temperament, character, and personality (Novikova, 2013b). These facts provide evidence of the universality of these traits (or factors) in different times and cultures.

Now the FFM framework is widely used across the world to study relations between personality traits and various aspects of social behavior, including one's attitude to health, learning process, job, and professional performance, life values, computer gaming, religious orientation, work stress, substance use, adult temperament, and exposure to workplace harassment (Cook, McDaniel, & Doyle-Portillo, 2018; Furnham & Heaven, 1999; Nielsen, Glasø, & Einarsen, 2017; Novikova, 2013a; Novikova et al., 2017; Novikova & Vorobyeva, 2017; Parks-Leduc, Feldman, & Bardi, 2015; Poropat, 2009; Rogers, McKinney, & Asberg, 2018; Wechsler, Benson, de Lara Machado, Bachert, & Gums, 2018).

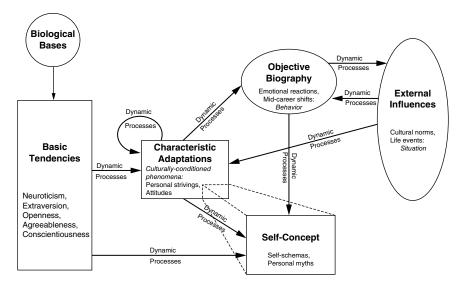
# The Five-Factor Theory

Allik and McCrae (2002) stated that the FFT originated as a means of understanding the extraordinary stability of personality traits across periods of many years (Costa & McCrae, 1994a, 1994b). Longitudinal research had shown that life experience appears to have little systematic effect on basic personality traits. As behavior genetic studies have found that genes have a powerful effect compared to a vanishingly small effect of the shared environment (Riemann, Angleitner, & Strelau, 1997), these combined observations led to the implication that "traits are endogenous dispositions, relatively untouched by life experience" (Allik & McRae, 2002, p. 304).

According to FFT, personality can be seen as a system (see Figure 33.1):

The chief inputs are *Biological Bases* and *External Influences*—the organism and the environment. The ultimate output is labelled the *Objective Biography*; it is the cumulative record of a person's acts and experiences. At any one point in time, it represents the individual's behaviour. More novel and interesting are the distinctions made within the system, specifically, the distinction between *Basic Tendencies* and *Characteristic Adaptations*. (Allik & McRae, 2002, p. 304)

According to FFT, *traits* (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) are understood as "*Basic Tendencies*, rooted in biology," and "they interact with the environment in shaping those



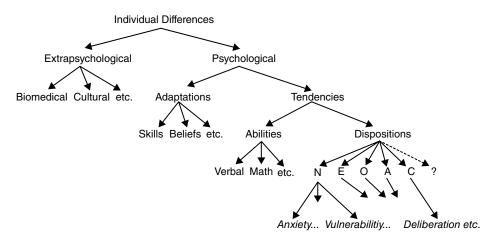
**Figure 33.1** Representation of the personality system, with categories of variables, specific examples, and arrows indicating causal pathways. Source: Allik and McCrae (2002). © Springer Nature. Reproduced with permission.

psychological structures that directly guide behavior: Habits, values, plans, skills, scripts, schemas, relationships," namely, Characteristic Adaptations. Self-Concept is the aspect of Characteristic Adaptations which also can be shaped by traits and "it is the source of information that people draw on when completing personality questionnaires" (Allik & McRae, 2002, p. 304).

Figure 33.2 sketches a simple hierarchical taxonomy of individual differences (McCrae, 2010, p. 59) that helps to explain the scope and place of the FFM in personality psychology. At the broadest level, psychological variables are distinguished from extra-psychological variables. In the FFT (as seen in Figure 33.1), psychological individual differences are subdivided into characteristic adaptations (that include, e.g., skills and beliefs) and basic tendencies. The latter refer to more basic, abstract ways of living and are found in all cultures and at all times. Traditionally, they have been divided into abilities and dispositions which are in turn represented by the FFM factors. And the lowest level of the taxonomy is the facet level.

Analysis of Figure 33.2 takes us back to the principal questions of trait theory about the number of basic personality dimensions (traits, factors, or domains). This problem continues to be discussed in two opposite directions:

- the rationale for more than five factors ("the Big Sixth"), including, among others, indigenous studies that will be considered further (Ashton et al., 2004; Cheung et al., 2001);
- 2 the search for the higher-order structure of the Big Five dimensions: the Big Two (Alpha and Beta factor, or Stability and Plasticity) (Digman, 1997) and even Big One or General Factor of Personality (GFP) at the apex of the dimensional hierarchy (Musek, 2007, 2017).



**Figure 33.2** Sketch of taxonomy of individual differences. Source: McCrae (2010). © Taylor & Francis. Reproduced with permission.

However, despite these discussions, McCrae asserted that "the five factors of the FFM are clearly necessary, and perhaps sufficient, at this level of the hierarchy" (2010, p. 60).

So, McCrae and Costa (1996, 1999, etc.) have considered FFT an attempt to conceptualize recent findings on personality traits in the context of development and operation of the whole personality system. FFT proposes to consider the problem of how biology and culture interact in the development of habits, attitudes, values, roles, and relationships, which express both the individual's traits and the press of the social environment. McCrae (2000) suggested that to answer these questions, the analysis should be conducted on three levels:

- Transcultural analyses look for universals in personality that transcend cultural differences;
- *Intracultural* analyses examine the specific expression of traits in a given culture:
- *Intercultural* analyses compare cultures on aggregate trait characteristics (typically means) and study their relations to features of culture.

In the following sections, we will examine the studies of FFM and FFT across cultures in more detail.

# FFM Personality Traits Across Cultures

# Transcultural Analyses

If, as FFT asserts, N, E, O, A, and C are biologically-based aspects of human nature, then they must be universal (Allik & McCrae, 2002; McCrae, 2000; McCrae & Costa, 1997). And now, a large number of studies suggest that the FFM is being replicated in all the studied cultures. One of the first attempts to demonstrate the universality of FFM in different cultures was made by representatives of the lexical approach, examining personality factors in trait adjectives from different languages and asking people to rate themselves on a series of adjectives (Goldberg, 1992). As noted by McCrae and Jones (1992, p. 184), "If we assume that personality structure is universal, we should be able to extract the same basic factors from analyses of any natural language, and there is some evidence to support this position." Indeed, five factors in Norman's (1963) and Goldberg's (1981, 1990) variances are found in German, Dutch, and most European languages, as well as in Asian languages such as Chinese, Japanese, and Filipino (Bond, Nakazato, & Shiraishi, 1975; Borkenau & Ostendorf, 1990; Church & Lonner, 1998; Yang & Bond, 1990).

The universality of the five-factor structure is confirmed by the fact that in each culture the indigenous (not translated from English) set of personality traits was found. However, full compliance with the five factors was not observed in all

studies in different cultures. In many cases, the high stability of four factors was confirmed, but variability in the fifth factor was observed, or an additional sixth factor was found. For example, in Russia, the high stability of four factors was shown, but Emotional Stability was replaced by an "Infantile and Romantic Self-Acceptance" factor (Shmelev, 2002). In Chinese studies, four to five factors were stably reproduced, but the "Chinese Tradition" factor was found to be no less stable (Cheung & Leung, 1998). In general, lexical studies have shown mixed results: E, A, and C factors almost always appear, while N and O sometimes do not (Saucier & Goldberg, 2001). McCrae (2002a) believed that it is not clear from these studies whether those factors are missing from the culture, or merely from the set of adjectives studied.

Using questionnaires, researchers have conducted a large number of studies to investigate the universality of the five factors of personality. For example, Hendriks et al. (2003) investigated the structural invariance of the Five-Factor Personality Inventory (FFPI) across 13 countries representing the Germanic (Belgium, England, Germany, the Netherlands, the USA), Romance (Italy, Spain), and Slavic branches (Croatia, the Czech Republic, Slovakia) of the Indo-European languages, as well as the Semito-Hamitic (Israel) and Altaic (Hungary, Japan) language families. This research is interesting because, on the one hand, the FFPI originates from the lexical paradigm, but, on the other hand, in writing the item pool, "the authors have been inspired by the NEO item format: instead of selecting a representative set of trait adjectives from the trait domain, brief personality-descriptive sentence items were written, referring to observable and concrete behaviour" (Hendriks et al., 2003, p. 350). The FFPI assessment of a person's position is on the dimensions of Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Autonomy (the authors' new interpretation of the fifth factor, a broader concept than Intellect or Openness to Experience). As a result of this research, a five-factor structure of the FFPI was found in all samples except one (the USA) and an international FFPI reference structure was proposed (Hendriks et al., 2003).

The best-known internationally validated instrument for measuring the FFM is NEO-PI-R/3 (Allik et al., 2017; Hendriks et al., 2003). It is no coincidence that its factor labels have become almost synonymous with the five-factorial personality model (De Raad, 1994). NEO-PI-R/3 has been translated into dozens of different languages and used in many cross-cultural studies of personality traits around the world. McCrae and his colleagues (McCrae, 2001, 2002b; McCrae & Allik, 2002) reported that global studies of self-rated NEO-PI-R scores were reported for 26 countries, territories, or cultural groups, and subsequently for 36 countries. In 2005, results of the usual self-reports were supplemented by NEO-PI-R/3 observer ratings of personality from 50 countries/territories (McCrae, Terracciano, & 78 Members of the Personality Profiles of Cultures Project, 2005). In general, a reasonable approximation to the intended structure has emerged for all cultures. The universality of age changes from adolescence to adulthood in different cultures was also revealed in these studies, namely, decreases in Neuroticism, Extraversion, and Openness, and increases in Agreeableness and

Conscientiousness (McCrae, 2002a). Furthermore, gender differences appear to be universal in all studied cultures, but the differences are relatively small compared to variation within each gender (McCrae, 2002a). Typically, women score higher than men in N1: Anxiety, N6: Vulnerability, O2: Aesthetics, and A2: Straightforwardness. Men score higher in E3: Assertiveness, E5: Excitement Seeking, O5: Ideas, and C1: Competence (McCrae, 2001).

Results of these studies' data allowed McRae and his colleagues to conclude that the FFM is a universal structure, and thus should be useful in cross-cultural research (McCrae, 2004; McCrae & Allik, 2002; McCrae & Costa, 1997; McCrae, Terracciano, & 78 Members of the Personality Profiles of Cultures Project, 2005). Moreover, FFM cross-cultural studies became one of the most important arguments for the FFT (Allik & McCrae, 2002).

The results of the most recent global cross-cultural study of the universality of the FFM appeared in 2017 (Allik et al., 2017). This study reported mean scores on the NEO-PI-R/3 for 71,870 participants from 76 samples and 62 different countries or cultures and 37 different languages. This study confirmed that personality differences across countries and cultures are very small; for instance, in more than 98% of all cases (30 subscales or facets by 76 samples), the differences from the 1992 American norms were smaller than one standard deviation. The smallest cross-cultural variation of mean values across all samples was on E2: Gregariousness and the largest was on O6: Values (Allik et al., 2017). The authors concluded that mean differences in personality traits across countries and cultures were about 8.5 times smaller than differences between individuals from these samples, and analysis of variance did not reveal significant differences in variance among the five factor means in different samples.

# Intracultural Analyses

A number of studies have examined the expression of traits in individual cultures. In particular, researchers have been interested in comparative studies of personality profiles of cultures, compiled on the basis of NEO-PI-R/3 self-report data and national stereotypes. Notions of "national character" have also attracted significant interest. In such studies, investigators have obtained conflicting data. For example, McCrae and colleagues (McCrae, Terracciano, & 78 Members of the Personality Profiles of Cultures Project, 2005) showed that culture means derived from self-reports were significantly related to culture means derived from observer ratings of college-age, adult, and young adolescent targets. However, Terracciano et al. (2005) argued that mean personality profiles are essentially unrelated to national stereotypes: for example, the British are generally considered very reserved, but in fact they score among the highest nations in the world in Extraversion.

Equally contradictory are the results of comparison between national character, as described in fiction and in scholarly literature, and the means of self-reported NEO-PI-R data. On the one hand, Lima (2002) found some support for writers'

views of the Portuguese in the mean levels of their NEO-PI-R data. On the other hand, Hřebíčková et al. (2002) did not find such agreement about the national character of Czechs, Poles, and Slovaks.

Similarly, the existence of the so-called "Russian soul" was not confirmed when compared to NEO-PI-R personality profiles (Allik et al., 2010). In carrying out this large-scale study, members of the Russian Character and Personality Survey collected data from 39 samples in 33 administrative areas of the Russian Federation (N = 7,065). Respondents identified an ethnically Russian adult or college-aged man or woman whom they knew well and rated the target using the Russian observer-rating version of the NEO-PI-R (Martin, Costa, Oryol, Rukavishnikov, & Senin, 2002). Scores were converted to t-scores using the means and standard deviations of an international sample (McCrae et al., 2005b).

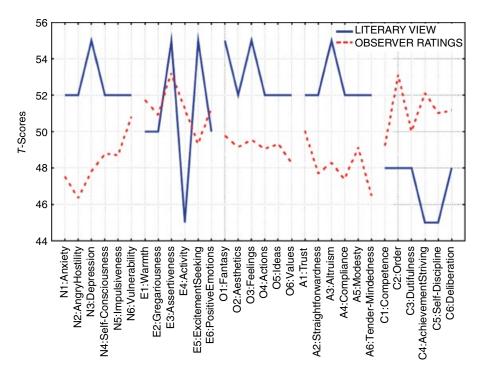
The results of the Russian study show, first, that the mean personality profile of Russians was very similar to the international average based on 50 different countries; Russians were within the average range on all domains and facets. Modest deviations from average were seen for N1: Anxiety, N2: Angry Hostility, N3: Depression, A2: Straightforwardness, A4: Compliance, and A6: Tender-Mindedness (Russians scoring slightly lower than others); at the same time, Russians were slightly above the pancultural average on E3: Assertiveness, E4: Activity, C2: Order, and C4: Achievement Striving, which corresponds with European stereotypes of Russians (Allik et al., 2010, pp. 381–382). Second, the study authors argue that (see Figure 33.3):

the way Russians are described by their compatriots today does not replicate the portrayal of the Russian soul in fiction and the scholarly literature. Presumed melancholy is not reflected in higher N scores, spirituality is not seen in elevated Openness scores, and the oft-mentioned fatalism and indolence are contradicted by higher Activity and Achievement Striving scores. (Allik et al., 2010, p. 382)

Third, the authors added 15 new "emic" items to the 240 NEO PI-R. These items were created to depict some characteristics that are often portrayed as typical for Russians. Eleven of the 15 items had at least one correlation with the FFM factors; therefore "emic" aspects of Russian personality provided no new information beyond the familiar FFM dimensions (Allik et al., 2010). Finally, the results of the study allowed Allik et al., (2010, p. 372) to conclude that "perceptions of the Russian soul do not seem to be based on the personality traits of Russians."

# Intercultural Analyses

Allik and McCrae (2002) suggested that if the intercultural analysis is based on a hypothesis of FFM universality, there should be no association between features of specific culture and mean levels of traits, or there should be a similar association



**Figure 33.3** Schematic representation of Russian personality as portrayed in literature and scholarly writings (solid line) and mean personality profiles of observer ratings of Russian targets compared to international norms (dashed line). Source: Allik et al. (2010). © Sage Publications. Reproduced with permission.

between universal cultural characteristics and traits. One confirmation of this hypothesis is in the results of comparison of former East and West Germany samples by Angleitner and Ostendorf (2000). They found identical factor structures for the traits and very similar mean levels of NEO-PI-R scores: East Germans scored about one-fifth standard deviation lower than West Germans on O, but did not differ on any of the other factors (Allik & McCrae, 2002).

Relations between Geert Hofstede's (2001) cultural factors (Individualism, Power Distance, Masculinity, Uncertainty Avoidance) and average NEO-PI-R scores in a country founded by McCrae (2002b) also confirmed the Allik and McCrae hypothesis. For instance, groups high in E scored high on Individualism, and groups low in E and O and high in C scored high on Power Distance.

We believe that intercultural analysis can include research that examines the links between personality traits and other psychological characteristics (e.g., values) or social behavior (e.g., job performance, academic achievement) in different cultures. The universality of the FFM structure will be evidenced by similar correlations in different cultures. Parks-Leduc et al. (2015) undertook the first meta-analysis of cross-cultural differences in the association between FFM

traits and values and showed little evidence of a cultural effect on the strength of trait-value relations. The primary studies included in the meta-analysis were conducted in 13 countries in North America, Europe, and Asia. Values were considered according to the widely-used Schwartz (1992) rating that identifies 10 broad values based on the motivations underlying them (Power, Achievement, Hedonism, Stimulation, Self-direction, Universalism, Benevolence, Conformity, Tradition, Security). The meta-analysis revealed that Openness to experience is strongly correlated with Self-direction; has a moderate positive relation with Stimulation and Universalism; and has a moderate negative relation with Tradition, Conformity, and Security. Agreeableness relates most strongly with Benevolence; has a moderate relation with Power, Universalism, Conformity, and Tradition values. Extraversion demonstrates moderate correlation with Stimulation, Power, Achievement, and Hedonism. Conscientiousness is moderately related to Security, Conformity, and Achievement. Emotional stability (Neuroticism) did not demonstrate any significant relation with the values domains (Parks-Leduc et al., 2015, p. 13). The results of this study confirmed the authors' premise that more cognitively based traits are more strongly related to values and more emotionally based traits are less strongly related to values, regardless of culture.

Studies of FFM traits as predictors of academic achievement have also confirmed the universal nature of the relations (Novikova & Vorobyeva, 2017). Researchers have reported high predictive power for personality traits in evaluating academic achievement in a number of different countries/cultures (Rosander, Bäckström, & Stenberg, 2011; Salgado & Táuriz, 2014). Investigators discovered that C and O are highly associated with academic achievement in high school and university students (Poropat, 2009; Salgado & Táuriz, 2014). C is regarded as one of the main academic achievement predictors in most age groups (pre-school, elementary school, high school, college, and university students; Noftle & Robins, 2007) as well as in adult subjects undergoing additional training (Vedel, 2016). Most studies conducted on both national and international samples indicate C as the main factor, or even the only one, associated with academic achievement (Duff, Boyle, Dunleavy, & Ferguson, 2004; Salgado & Táuriz, 2014).

Vedel (2016) reported positive associations between O and both standard academic grades and, to a lesser extent, cognitive ability. Of all the Big Five traits, O showed the most prominent associations with SAT test results (Noftle & Robins, 2007). However, for academic subjects that require a lesser degree of creativity, high levels of O may not always correlate with academic achievement (to the point where O shows negative associations with academic achievement in such disciplines; Busato, Prins, Elshout, & Hamaker, 2000; De Fruyt & Mervielde, 1996).

Several Russian studies have provided additional information about the correlations between Big Five traits and academic achievement. For example, Gavrilova (2013) reported that C and A may be regarded as more desirable traits in high school students, while N is regarded as an undesirable trait. Further, according to Gavrilova, C correlates with higher motivation and N correlates with lower

motivation in students. On the contrary, in a sample from the Higher School of Economics branch in Nizhny Novgorod, Kochergina, Nye, and Orel (2013) found that FFM personality traits were significant predictors only of the Unified State Examination (USE) results in high school, and they did not show connections with current academic performance in university, a discovery confirmed by the results of both regression and correlation analysis. The authors noted that the results were only partially consistent with the results of similar studies conducted in Western psychology. Among the possible sources of these inconsistencies the authors listed differences in the educational environment of different countries and the various requirements presented by specific universities.

We studied the FFM personality traits in relation to academic achievement in first- and second-year Russian students of linguistics departments at the RUDN University (Novikova & Vorobyeva, 2017). FFM traits were measured with the Russian NEO FFI adaptation (Bodunov & Biryukov, 1989). We defined academic achievement as the average value of the semester final grades received by a student in five fields of study: the first foreign language (English), the second foreign language (selected by the student), general education disciplines, specialty disciplines, and psychology & pedagogics. Based on Spearman correlations, we concluded that C is more associated with greater academic achievement in most fields of study compared to other FFM traits. Our results were closer to the results of similar cross-cultural studies than to Russian data. The fact that we used a grading system more similar to international systems instead of the traditional five-point Russian scale may account for this difference. Therefore, we concluded that C seems to be the universal academic achievement success factor.

# Conclusion

Universalism, as one of the dominant approaches in contemporary psychology, seeks to find common features that are characteristic of all people, regardless of their nationality or culture. In line with this trend, one of the most popular contemporary personality theories—the Five Factor Theory based on the Five Factor Model of personality traits by McCrae and Costa—holds that there are five fundamental traits (Neuroticism, Extraversion, Openness to experience, Agreeableness, and Conscientiousness) that are replicated in all cultures, as confirmed by a large number of studies in different samples and countries. For example, the largest cross-cultural study, conducted in more than 60 countries (71,870 participants), showed that mean differences in personality traits across countries and cultures were about 8.5 times smaller than differences between individuals from within these samples, and there are not significant differences in variance between the five factors' means in different samples. Thus, according to FFT, personality traits are biologically-based dispositions or basic tendencies. Supporters of the FFT believe

that people develop specific patterns of thoughts, feelings, and behaviors (also referred to as characteristic adaptations) depending on their relative standing on these basic five traits and in interaction with their individual environments.

Universality of the FFM personality structure across cultures is the most important argument for the FFT; however, both the model and the theory are the subject of scientific discussions. For instance, Block (1995, 2001, 2010) summarized criticism of "five-factor framing" in terms of: (a) the atheoretical nature of the five factors; (b) their "cloudy" measurement; (c) the model's inappropriateness for studying early childhood; (d) the use of factor analysis as the exclusive paradigm for conceptualizing personality; (e) the continuing non-consensual understandings of the five factors; and (f) the existence of various unrecognized but successful efforts to specify aspects of character not subsumed by the five factors (Block, 2010).

The creators and supporters of the FFT, responding to criticism, believe that the possibility of adequate translation of the NEO-PI-R/3 into more than 40 languages or dialects and the replicability of the questionnaire factor structure in more than 60 countries (both for self-reports and observer ratings) serve as essential evidence of FFM universality. They recognize that, first, the fact that these five factors are universal does not necessarily mean that there are not additional personality factors specific to individual cultures, and, second, these five factors may not all be equally important in every culture. However, they claim that there is no need to develop a viable trait psychology in each culture: "The fruits of research anywhere can now be enjoyed everywhere" (McCrae, 2002a, p. 9).

McCrae (2010) has stated that traits themselves do not determine a person's life, nor do their levels, as any trait at basically any level may prove adaptive or maladaptive. The FFM is not the answer to all the questions of personality psychology; it is at best what Norman (1963) hoped for: an adequate taxonomy of personality traits. We can conclude, despite ongoing discussions about the universality of the FFM and the validity of the FFT, they are widely sought after in cross-cultural studies around the world and have many practical applications in different countries.

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# Part XII Concluding Thoughts

We have seen, in the earlier chapters of this book, many of the ways that our understanding of the relation between psychology and culture has evolved over more than a century. Yet important major challenges remain. We see ongoing conflicts among the peoples of the world, frequently arising from political, religious, and ideological differences. Psychology has much to offer as we strive to understand others' feelings, cognitions, and needs.

As the Earth's population increases, we realize more than ever the effects of environmental limits and the inequities existing in the distribution of the world's resources—in nutrition, education, and health care, among others. The advance of sophisticated technology has produced a mixed picture, improving communication, education, and access to information for many, but also contributing to the gap between the "haves" and the "have nots" in other cases. Psychologists with an understanding of culture may well play a role in solving these complex problems, particularly to the extent that researchers can add to the data and knowledge base on needs of Majority World countries.

The teaching of psychology and culture continues to grow, both in terms of the number of courses available, and the breadth and sophistication of material covered. This is as it should be, as cross-cultural studies find their way into the mainstream of psychological research and interest. However, we might also hope to see the day when all teaching in psychology will be sensitive to the importance of cultural influence on the science of the discipline. We could thus envision a future in which the teaching of cross-cultural psychology would no longer be necessary, a time when the term *psychology* will encompass not only traditional mainstream psychology, but also the role of culture in all its diverse and rich aspects.

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# Culture and Psychology

# Prospects and Possibilities

# Kenneth D. Keith

The field of cross-cultural psychology, as embodied in research and teaching, has come a long way since its modern era inception early in the twentieth century. From an early fascination with so-called primitive cultures, and how they differed from those cultures considered more advanced, investigators have moved toward a much more nuanced approach to the study not only of differences and similarities, but of the complex interplay between culture and behavior as well.

As the authors of the chapters in this volume have illustrated, cultural and cross-cultural researchers have explored a wide range of psychological processes, principles, and phenomena representing the spectrum of interests and subject matters of the discipline. From basic research methods to complex social interactions and organizations, cross-cultural researchers continue to advance our understanding. Yet there remain major issues for cross-cultural psychologists of the future. A host of serious challenges faces the world's cultures, and many of these challenges are candidates for psychological and behavioral understanding and solutions. Among these are the cultural conflicts engendered by political, religious, and governmental differences; major ecological and environmental challenges; distribution of resources necessary for sustaining human communities; and the implications of technological change. These challenges are the product of human behavior, and effective responses to them will likewise depend upon behavioral changes.

# World Conflict: Can Psychology Help?

As I write this chapter, the Global Conflict Tracker of the Council on Foreign Relations (2018) reflects 26 active conflicts in the world, rating 10 as "worsening," and none as "improving." These conflicts span several continents; their nature and cause vary from place to place, and include civil war, criminal violence, interstate disagreements, political instability, sectarian violence, territorial disputes, and terrorism.

# Political/Governmental Conflict

Violent conflict between cultural groups has existed throughout human history (Hofstede & Hofstede, 2005), and researchers have conducted studies aimed toward illuminating psychological principles that could aid understanding of international events and the kinds of decisions that lead to conflict. Bourne, Healy, and Beer (2003), for example, used various priming strategies to establish cross-cultural conflict scenarios, including the existence of hypothetical peace treaties, and tested the level of conflict responses of young American adults. Although these researchers found that dominant individuals were more aggressive than others in the face of the conflict scenarios, and that there are differences in response for men and women, they acknowledged the need to take such research beyond the laboratory, to the international context in the real world. Despite its limitations, their work illustrates the potential contributions of psychology to cross-cultural relations in a world that is too often threatening and violent.

One form of violence that seems to cry out for cross-cultural understanding is the behavior of those individuals whom members of Western and Asian cultures have labeled terrorists. Numerous countries, including Bali, Israel, Japan, Saudi Arabia, Spain, Sri Lanka, and the U.S. have seen violent attacks in which the attacker deliberately dies (Locicero & Sinclair, 2008). More recent years have brought attacks in France (Raymond, 2018), Afghanistan (Hincks, 2018), India, Nigeria, Morocco, and Mumbai (Weller, 2017), among others. Individuals living in areas with high levels of terrorist activity experience disruptions of ordinary life activities (Malik, Schat, Raziq, Shahzad, & Khan, 2018), and those exposed to terror attacks report sleep disruptions and post-traumatic stress (Goodwin, Lemola, & Ben-Ezra, 2018).

Social scientists have offered explanations for such violent behavior, ranging from the individual level to the community or cultural level. However, psychological analyses are sometimes contradictory, prompting Locicero and Sinclair (2008) to develop a psychological model including recognition not only of politics, but also the religious and ideological backdrop of terrorism. In the context of such developmental and ecological approaches, cross-cultural knowledge of development, cognition, altruism, personality, and social processes will surely have a role to play.

Psychologists have long understood the importance of tolerance for differences, but acceptance of cultural difference is too often overcome by anger, hate, fear, ethnocentrism, and nationalism (Hatfield & Rapson, 2005). A key to effective relations and communication across cultures is the ability of individuals to control negative feelings and judgments about others—the ability researchers call emotional regulation (Matsumoto & Juang, 2013). Rubaltelli and Pittarello (2018), for example, found that emotional intelligence may modulate perceptions of terrorist attacks and attitudes toward immigrants. Smith (2004) proposed that one of psychology's greatest contributions to international relations could be empathy—an understanding of the thoughts and feelings of others. Empathy is possible when individuals involved in ethnic conflict achieve understanding of the suffering and loss of others (Volkan, 1999), and may increase acceptance of stigmatized groups (Batson, Polycarpou, Bednar, Klein, & Highberger, 1997).

Despite the fact that progress toward intercultural understanding sometimes may seem unattainable, more than 70 years ago psychologists banded together to make a statement about peaceful relations among cultures (Smith, 1999). Signed by some of the most prominent psychologists of the time, *The psychologists' manifesto: Human nature and the peace: A statement by psychologists* (Allport et al., 1945) identified a number of tenets that remain timely today. They included:

- War can be avoided: War is not born in men; it is built into men.
- Racial, national, and group hatreds can, to a considerable degree, be controlled.
- Condescension toward "inferior" groups destroys our chances for a lasting peace.
- Liberated and enemy peoples must participate in planning their own destiny.
- The root desires of the common people of all lands are the safest guide to framing a peace.
- The trend of human relationships is toward ever wider units of collective security (Smith, 1999, p. 5).

World events of the seven decades since these psychologists issued the *Manifesto* might seem to suggest they had little influence on cultural relations. Yet the possibility that psychology could contribute to understanding and reduction of conflict still might seem self-evident. However, Ratner (2006) observed that cultural psychologists have seemed disinclined to include political issues as a part of their studies of culture. And historically, out-group enemies have often served to preserve in-group cohesion (Hofstede & Hofstede, 2005). Nevertheless, some psychologists have persisted, studying the psychosocial consequences of violence, terrorism, and disasters for children (Williams, 2007), the relation between international conflict and social identity (Kolbe, Boos, & Gurtner, 2005), and moral characteristics of rescuers, bystanders, and Nazis during the Holocaust (Monroe, 2008), among many other correlates of intercultural conflict.

A burgeoning literature in peace psychology reflects clear international interests. Peace psychology is an interdisciplinary enterprise that cuts across cultures, drawing

upon such diverse areas as clinical, developmental, political, and positive psychology, as well as other disciplines (e.g., history, international relations, political science, and sociology), in an attempt to support a culture of peace at both the individual and cultural levels (Woolf & Hulsizer, 2018). Among a broad range of topics, peace psychologists place emphasis on international human rights and the role of cultural norms in supporting peace or conflict (Louis, 2014), and researchers have analyzed the effects of international peacekeeping efforts (e.g., Mironova & Whitt, 2017). Still, the need for continuing cross-cultural research and teaching seems clear in the face of ongoing international conflict

## **Environment/Resource Distribution**

Further prospects for cultural conflict may be found in the connection between cultures and the environmental limits of the Earth, and in the vast global inequalities that exist among the countries of the world—inequalities in, for example, income, nutrition, education, and health care. Billions of people, about two-thirds of the Earth's population, have no safe sanitation facilities, more than a billion lack access to safe drinking water, and nearly two million children die each year as a result of these conditions (George, 2008). To those living in the industrial world, these resources are necessities, taken for granted by many—yet modern culture would not exist without them (see Johnson, 2006), and increasing world population will only bring the likelihood of more cultural competition for limited supplies of such natural resources as water. Life in the least affluent countries is especially difficult for people with disabilities, where no more than 10% of such individuals may receive any kind of human services (McConkey & O'Toole, 2000), and where construals of disability vary widely across cultures (Mpofu et al., 2018).

Similarly, while obesity has become a significant problem in some industrialized countries, more than 800 million of the world's population are chronically malnourished (World Hunger Education Service, 2017). The increasing human population and the attempts of that population to develop the resources necessary to sustain it have resulted not only in conflict between cultures, but also in degradation of the natural environment. Thus, in Majority World countries, increasing population has produced massive deforestation, including the destruction of millions of acres of rainforest each year and contributing significantly to global climate change (Kanninen et al., 2007). Climate scientists predict increasingly significant challenges as global temperatures continue to rise, sea level rises, the frequency of severe weather events increases, droughts are more common, and wildfires become a more regular occurrence (NASA, 2018).

Cross-cultural researchers have begun to investigate behaviors and attitudes in the face of these environmental and ecological concerns. This work has included, for example, studies of motives concerning environmental issues (Milfont, Duckitt, & Cameron, 2006), the influence of framing on judgments of climate change risk (Teigen, Filkuková, & Hohle, 2018), effects of water conservation (Corral-Verdugo, Carrus, Bonnes, Moser, & Sinha, 2008), environmental values (Reser & Bentrupperbumer, 2005), and the relation between beliefs and behavior in the realm of climate change (Hall, Lewis, & Ellsworth, 2018). Lest we assume that such environmental problems and conflicts exist only in Majority World countries, we need look only as far as heavily populated and industrialized regions of the U.S. to see major cultural conflicts over issues like availability of water and use of land (Walters, 2009).

Western scientists have examined such psychological underpinnings as moral foundations and their role as potential predictors of action to avert climate change (Dickinson, McLeod, Bloomfield, & Allred, 2016). And Blennow, Persson, Tomé, and Hanewinkel (2012), in a cross-cultural study, have examined the possibility that belief in local effects and personal experience with perceived climate change can explain human responses to the phenomenon. The time has surely come for a psychology that not only describes cultural differences, but also grapples in a serious way with the underlying causes of such differences as we move toward improved understanding of cultural and societal relations (Heine & Norenzayan, 2006). Pancultural behavior change in the realm of environment and resources will be critical; in fact, our lives may depend upon it.

# Technological Change

I have fond memories of a fascinating conversation with my grandfather. He told me about his earliest recollections of the first locomotive when it arrived in his small Midwestern town; the barnstorming airplanes that came to local fairs and festivals; driving to his wedding in a horse-drawn wagon; and the wonder he felt when, later in his life, he watched on television as the first humans landed on the surface of the moon. My grandfather's story reflects enormous cultural and technological change occurring within the lifetime of a single person. The lives of billions of people have changed in important ways as a result of changes in technology, transforming how we do business, how we educate our young, and even how we interact interpersonally.

For many of the world's people, technology, particularly as embodied in the computerized, digital realm of modern industrialized societies, has brought convenience, access to information, and greater affluence. On the other hand, heavy television watching is associated with reduced levels of happiness (Argyle, 1999) and with increased metabolic risk (Machado-Rodrigues et al., 2015), perhaps suggesting that not all technology produces good outcomes for people, even in rich societies.

Many of the world's people, of course, lack access to technology, although this is changing. In Ghana, for example, between 2002 and 2015 the percentage of

people owning a mobile phone increased from 8% to 83%, and the proportion of individuals with cell phones (but not necessarily smartphones) in several Sub-Saharan African countries is similar to that of Western countries (Pew Research Center, 2015).

According to a report published by the International Monetary Fund (Jaumotte, Lall, & Papageorgiou, 2008), wider access to education is one key to a broader ability to take advantage of the opportunities associated with technology. But technology may be a double-edged sword; although income inequality (between "haves" and "have nots") has decreased somewhat (though remaining high) in Sub-Saharan Africa, in many other places around the world, including many industrialized nations, it has increased in recent decades (Chen & Ravallion, 2004, 2007; Savoia, 2017). This increasing inequality in income, Jaumotte et al. (2008) reported, has come, at least in part, as a result of the influence of technological change. And, although inequality of resources may not lead inevitably to cultural conflict, there is a need, especially in Majority World countries, for reliable, high-quality data from researchers studying the issue (Cramer, 2005).

# Summary

The issues I have mentioned in this section represent only a few of the pressing challenges facing the people of planet Earth in the twenty-first century. As long as we continue to exhibit the universal tendency to elevate in-groups and denigrate out-groups, humans will experience cultural conflict. Although today we would see many of his views as outmoded, Sumner (1906), writing more than a century ago, discussed these issues, and others—war, land, inequality, racial divides, women's roles, the economy, and more—that continue to trouble us today. It is no doubt true, as Cole (2006) concluded, that psychologists cannot solve all the world's problems, but, Cole pointed out, if they work with others—from different cultures and different disciplines—psychological scientists can certainly be contributors to solutions for the common problems of humanity. There is no lack of opportunity, no dearth of challenges, for the budding psychologist with an interest in culture.

# Where Have We Been?

The authors of the earlier chapters in this book have provided a variety of cultural perspectives from which to view many of the subject matters of twenty-first-century psychology. These have included such broad concepts as universal ethnocentric tendencies, basic research methods underlying cross-cultural research, the wide scope of human development, the culture–cognition connection,

the relation between biology and culture, the roles of women across cultures, culture and emotion, and human health and well-being. Some other chapters have a more specific or focused emphasis: disability, historical aspects of research in perception, sexual minorities, psychotherapy, conceptions of self, attribution theory, attractiveness, and African organizational styles. The authors of chapters on these topics, and more, have demonstrated that cross-cultural psychology spans a fascinating range of theoretical, empirical, and applied interests.

Although we have used the term *cross-cultural psychology* as an inclusive label, these chapters contain ideas consistent with the perspectives identified by previous writers as cross-cultural (Matsumoto & Juang, 2013; Segall, Dasen, Berry, & Poortinga, 1999), cultural (Heine, 2012; Valsiner, 2013), and indigenous (Allwood, 2018; Shams, 2002). And they touch upon aspects of all the domains that Kagitçibaşi and Berry (1989) suggested cross-cultural psychology should encompass: theory and method, biology and evolution, perception and cognition, social psychology, values, and attitudes, personality, gender, human development, mental health and therapy, ethnic psychology and acculturation, and work and organizational psychology. Further, the authors of this volume share at least three core values:

- 1 They couch their work in research-based findings arising from empirical investigation.
- 2 They assign culture a central role in their research and their interpretations.
- 3 They are committed to broadening cultural understanding, and to strengthening cross-cultural psychology, through teaching.

The last of these, teaching, holds promise not only for development and communication of the content of cross-cultural psychology, but also for cultivation of the next generation of psychologists who will place culture at the fore in their own future work. What can we learn from psychologists who have made the teaching of cross-cultural psychology their central emphasis?

# **Teaching Cross-Cultural Psychology**

As you have seen in Chapter 1 of this volume, teaching in American psychology has too often been limited in its scope, with its focus placed largely on white European Americans. Western psychologists have too often assumed that their findings were universally valid (e.g., Arnett, 2009), leading critics to argue that mainstream psychology has been mechanistic, individualistic, and acultural (Misra & Gergen, 1993). The cultural limitations of Western psychology are not new; Albee (1988), for example, pointed out the ethnocentrism and prejudice present in the work of early leaders in the field, including Francis Galton, G. Stanley Hall, and Robert Yerkes, among others. Despite longstanding neglect of culture in the

teaching of undergraduate psychology, numerous authors (e.g., Lonner, Keith, & Matsumoto, 2019; Segall, Lonner, and Berry (1998)) have argued that cross-cultural psychology is a scholarly field that should find its place in the curriculum.

A number of teachers of psychology have worked to develop pedagogical approaches to effectively teach cross-cultural psychology. As early as 1975, Brislin wrote about teaching the subject, and Cushner (1987) characterized cross-cultural psychology as the "missing link" in teaching, suggesting that students' understanding of culture may be impaired by their lack of experience, and that, conversely students who have traveled abroad may lack the conceptual foundation to properly appreciate the experience. At about the same time, Cole (1984) observed that cross-cultural psychology was "often treated as a slightly miscreant stepchild, or perhaps as just a specialized method" (p. 1000). Cushner described the use of scenarios presenting students with depictions of incidents involving people from different cultures. This is a technique that Brislin, Cushner, Cherrie, and Yong (1986) called culture-assimilator training. Participants choose from among possible alternative responses to the incidents, and receive feedback about their choices—resulting in improved knowledge and empathy.

Goldstein (1995) offered guidelines to psychology teachers for integration of culture and diversity into the curriculum. Specifically, she recommended:

- 1 avoiding the marginalization of cross-cultural materials and perspectives
- 2 raising awareness about bias within the cross-cultural literature
- 3 avoiding the creation or reinforcement of stereotypes
- 4 using accurate terminology to make cross-cultural comparisons
- 5 distinguishing between etics and emics
- 6 creating a classroom environment in which diversity is valued. (pp. 228–231)

Cross-cultural teachers, Goldstein argued, could be transformative agents in moving the field of psychology toward recognition of human diversity and preparing students to more effectively combat bias and stereotyping in research and practice.

Hill (2002) further emphasized the importance of integration of cross-cultural perspectives in the teaching of psychology, not only noting the limitations of an ethnocentric American psychology, but also suggesting that the field would suffer the loss of multicultural and international students who might choose not to enter a field they perceived lacking in ethnic and cultural diversity. Hill's message echoed that of Albert (1988), who described the neglect of the concept of culture, and Romero (1988), who advocated for teaching emphasizing ethnic psychology.

Abrahamson (2009) described a variety of assignments designed to increase student awareness of culture and to bring students into contact with people of other cultures in meaningful ways. Abrahamson concluded that students gained heightened awareness and that faculty members reported improvement in

students' ability to interpret research across cultures. Goldstein (2008) presented a large collection of teaching activities, demonstrations, and assignments similarly intended to aid student understanding and application of cultural concepts in psychology courses, and Phan (2009) reported the use of a variety of games and simulations to engage students with cultural issues. More recently, Morling (2015) provided both a rationale for the importance of culture in the teaching of psychology, and a variety of ideas and activities for teachers. A number of authors have advocated for increased internationalization of the psychology curriculum (e.g., Gross, Abrams, & Enns, 2016; Rich, Gielen, & Takooshian, 2017), and others have suggested ways to integrate the teaching of psychology and culture across the curriculum (e.g., Keith, 2018a).

Clearly, teachers of psychology are increasingly making culture an integral part of their courses, and courses in cross-cultural psychology seem to be increasing in number in curricula (Hill, 2002; Morling, 2015). And, in addition to the aforementioned teaching activities and resources, such sources as the Society for the Teaching of Psychology (http://teachpsych.org) and Online Readings in Psychology and Culture (https://scholarworks.gvsu.edu/orpc) offer a variety of materials to support the teaching of culture and diversity. Cross-cultural psychology has indeed become a field meriting a place in the curriculum of the discipline (Segall et al., 1998).

## Conclusion

In an article prepared for an undergraduate student audience, Lonner (2000), a pioneering figure in cross-cultural psychology, emphasized the availability of resources, and the exciting promise yet to come in twenty-first-century psychology. He highlighted the vibrancy of the field, and the opportunities that lie ahead for students contemplating careers in psychology.

Increasingly, we live in a world made smaller by electronic communications, international travel, and multinational business. As I noted at the outset of this chapter, conflicts abound around the globe, and as I write this, health officials in Africa are battling an outbreak of the Ebola virus (Phillips, 2018). At the same time, the people of Africa have 700 million mobile phones (Adegoke, 2017)—vastly changing access of poor people to medical care, market information, and distant relatives (McPhee, 2008). The availability of information has, of course, become mind-boggling; for example, a recent Google® search using "culture" as a search term returned more than three billion entries! And the interconnected components of the multinational financial system nearly collapsed in the financial crisis of 2008. These examples, as well as the ease with which international commerce has both created and displaced industrial and commercial interests, illustrate the importance of cross-cultural communication, negotiation, and understanding in the twenty-first century.

In addition to the potential for conflict at the level of governments, religions, or economies, individuals increasingly face the need to communicate and interact in their work and their travel (Brislin, 2000; Lubbe & Douglas, 2009), with all the possibilities for misunderstanding and uncertainty inherent in such exchanges. Crosscultural psychology is a discipline that will be important to the future of today's students, and researchers will continue to refine and develop more useful and effective methodologies (Heine & Norenzayan, 2006; Matsumoto & Yoo, 2006).

For the near term, advocates for the teaching and development of cross-cultural psychology (e.g., Hill, 2002; Morling, 2015) are likely to continue to seek more cross-cultural courses in the curricula of psychology programs. This seems destined to be both useful and necessary. But, as we come to the conclusion of this volume, we might imagine a future in which culture would be an integral part of *all* teaching and research in psychology. In such a future, we would not need specialized courses to ensure consideration of cultural variables, and our psychology would be a psychology of *all* people (Keith, 2018b), not an ethnocentric European American discipline. This is the future Segall et al. (1998) dreamed of when they wrote that cross-cultural psychology will be shown to have succeeded when it disappears. For, when the whole field of psychology becomes truly international and genuinely intercultural—in other words, when it becomes truly a science of human behavior—cross-cultural psychology will have achieved its aims and become redundant (p. 1108).

I hope that you, the student reader, will be a contributor to this goal.

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