Birds of a feather – social interactions of University students in a classroom

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Abstract

Social networks can facilitate the communication among students and help them in learning. However, there are rare studies combining observation of students' behaviour in groups with their academic performance. Academic performance can boost one's reputation among peers, giving them a significant degree of social influence. Even if the process of building reputation in a network is usually slow, compared to the spread of deviant behaviour, it gives a potentiality for various effort making strategies. For example, Sacerdote (2000) shows that an increase in average peer achievement may lead to an increase of a student's own achievements. While obtaining new knowledge and developing social capital are definitely good sides of peer effect, reputation may also have drawbacks. For example the significant diffferences in reputation may arise possibilities of 'moral hazard' and free-riding strategies. Students with lower academic performance may be willing to stay close to high performing ones, wishing for their help or just treating them as "additional information assets". In turn, students with high academic performance may be reluctant to keep such ties, considering them abusive. In this study we want to investigate the patterns of social interaction among students during a semester. We analyse the spontaneous social networks closely related to the final evaluation of students: the peer selection for team work and the neighbourhood selection on the 'test days'.

Methods

We collected data on students taking seats in a classroom before six short tests in the beginning of the classes in Econometrics. Students did not change their seats after the tests. The tests' results accounted for 50% of student's final grade, therefore the 'test days' indicated nearly full attendance of students. The remaining 50% of final grade was divided into case studies assessments (team work, 20% of final grade) and individual work (30% of final grade). The previous tests' results were publicly announced before the consecutive ones. To verify the research hypotheses we utilise the Exponential Random Graph Model (ERGM) and descriptive statistics. The set of variables consists of students' personal characteristics (e.g. gender, the number of case study group) and their academic performance (the average results of tests).

Results

Similarly to other research (Lazarsfeld and Merton 1954; McPherson and Smith-Lovin 1987; McPherson et al., 2001; Poldin et al., 2014) we observe social segregation based on academic performance. The greater the difference in average results from tests is, the lower probability that the students will take seats close to each other. The probability of tie existing is also explained by gender homophily. The reluctance of taking seats close to students with significantly lower academic performance may be explained by efforts to avoid "free riding" behaviour.

HE economics specific

The paper presents the results of a field research conducted among students of Faculty of Economic Sciences, University of Warsaw during a course in Econometrics. The results of the study are of practical importance: we provide recommendations for lecturers of team working oriented subjects.