

THE EFFECT OF GROUP SOCIAL CAPITAL ON THE PERFORMANCE OF PhD STUDENTS

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Our purpose in this article is to study several characteristics of research group on the PhD students' performance. Writing articles and doctoral thesis are not solo activities, as they acquire exchanging ideas and cooperating with others. In order to study these social factors we proceed from theories of social capital. We observe social capital through distinctions that have been made in relevant literature, such as weak against strong ties, structural holes against cohesion and homogeneity against heterogeneity of a group.

As indicated above, measures of social capital are conceptualized in terms of complete cooperation networks. In comparison with egocentric networks, which focus on ties between ego and alters, complete networks include connections between all members of a group. To predict research performance of PhD students we specified structural equation model which was tested by the program Lisrel. We used data from Slovenian research done in years 2003/04 in framework of international project that includes Slovenian PhD students, their supervisors, and other members of research groups defined by supervisors.

Our results indicate that the size of network and the number of different institution from which people in research group come from have strong impact on the performance of PhD students. This is consistent with a theory that diversity of a group enables more possible solutions to a problem as a consequence of different knowledge and skills possessed within group members. Furthermore, our findings shows that the less constrained are PhD students by direct and indirect ties, the more successful they are. To put it differently, weaker connections between people in group represent holes in network structure. The PhD students, whose relationship span these holes, broker the flow of information between people, control the projects, and more easily combine the various points of view. Such a brokering position in network leads to increased creativity and productivity. However, it seems that cohesion of a group does not have the strong effect on the efficiency of PhD students, although it is supposed to enhance group norms and facilitate trust, which lower the level of competition and therefore increase willingness to collaborate.