Name:

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Title:

Social influence or friendship selection: dynamic networks and adolescent attitude and behavior dimensions

Abstract:

Behavioral similarity between friends is due to either peer influence or friendship selection, and the issue has been raised and discussed abundantly in the literature. These two opposite theoretical perspectives have their own advocates to justify the casual relationship between individual action and social network structure. Some studies apply quantitative methods on empirical data to examine whether selection or influence causes similarity among group members. We noticed that two issues have received less attention in the literature; thus they should not be omitted. One is behavior: issue that deals only with monotonic dimension of conceptualizing adolescent behavior. The other issue is related to network structure, where features of friendship network structure are treated as independent variables in the model to examine the relationship between individual behavior and social network. Our research interest is in network-behavior co-evolution that focuses on these two issues above. We used a longitudinal data to observe the changes in adolescents' friendship and their behavior in a number of networks. We collected 41 classroom networks in the first grade of secondary school (2,690 students), measuring multidimensional behaviors and friendship nominations at three time points during one school year to obtain longitudinal information about behavior and network dynamics. The students nominated up to 3 best friends in class and answered other questions about their family and school experiences. We have complete network data with the class as network boundary. To model and analyze our data, we used multidimensional scaling model with dynamics of friendship network to obtain adolescent network similarity/dissimilarity and to observe multidimensional behaviors in the joint analysis of selection-influence effects on behavioral similarity between peers.