

*Identifying peer effects in social networks with peer encouragement designs*

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Abstract:

Interactions among humans enable the spread of information, preferences, behavior, and disease. Despite large-scale measurement of human behaviors, credible identification and estimation of peer influence effects remains difficult. After reviewing other methods for identifying peer effects, we present research designs that enable point identification of peer effects for relevant populations. In these peer encouragement designs, vertices are randomly assigned to conditions that affect adoption of a target behavior; the experimenter then observes this behavior and that of their peers (i.e., how this "spills over" to their peers). We present an example of a large peer encouragement design that identifies the effects of receiving feedback from peers in social media. We relate these designs to prior experiments in groups and to the literature on instrumental variables estimation with heterogeneous treatment effects.