ABSTRACT

Group-based approaches to delivering preventive and treatment interventions are common, cost effective, and empirically-supported. Yet group process has received surprisingly limited empirical attention, and current analytic approaches are a mismatch to the inherently dynamic and complex
nature of intra-group relations. Traditional measures over-simplify group process, overlooking key between-group, between-person, and across-session variation that may have important implications for participant outcomes. In the present study, I aim to develop and test an innovative analytic paradigm for studying group process that integrates current best practices for studying social relationships and change over time: social network analysis (SNA) and methods sensitive to intra-individual change and variability over time (IIV). Integrating logic and tools from these two methods, we can gain a clearer picture of group processes, individuals’ unique experience of those processes, and change in these processes over time, as well as relations of these processes to intervention effectiveness.

Data were collected from two samples: 1) 119 undergraduate and graduate students enrolled in therapy groups at PSU’s Center for Counseling and Psychological Services; and 2) 109 teens and 129 parents enrolled in an ongoing efficacy trial of the Strengthening Families Program. Participants in both settings completed a short survey following each weekly session reporting on their current relations to group-mates (e.g., “who do you like and care about?”), and these data were used to create “social network maps” of each group at each session. Participants also reported weekly on their perceived progress, and pre- and post-intervention surveys assessed outcomes targeted by each intervention.

Social network statistics were computed as indicators of group process, and these indices of group process across sessions were separated into between- versus within-person/group sources of variation. Week-to-week changes in progress were examined in relation to individual- and group-level network indices, and means, trajectories of change, and amount of week-to-week variability in social network indices were examined as predictors of overall participant improvement. Overall, results support hypotheses that features of the group structure, individuals’ positions, and change over time in group process each uniquely contribute to intervention outcomes. More broadly, the findings provide support for the methods applied here are a useful approach to studying group process with predictive value above and beyond traditional approaches. By demonstrating this approach across two distinct group intervention settings, I take a first step toward demonstrating the broad range of settings across which this approach might be usefully applied to help evaluate, inform, and maximize the effects of group-based interventions.