Testing Peer Contagion in Youth Mental Health Services

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Statement of the Research Problem

Youth with the most challenging needs are often served in congregate care settings like group homes and residential treatment centers. However, concerns have been raised about whether services youths receive in groups are not just less effective, but may even be iatrogenic (Dishion, McCord & Poulin, 1999). As children age and differentiate from their family of origin, peer groups have a growing impact on a youth's attitudes and behaviors. Peer contagion, the idea that problem behaviors increase due to the influence of anti-social peers, is a key criticism that has been leveled at group-based interventions. Evidence of peer contagion has been found in various settings, including friendship groups (Poulin, Dishion, & Haas, 1999), school classrooms (Warren et al., 2005), social skills groups (Poulin, Dishion & Burraston, 2001), and juvenile detention centers (Bayer, Pintoff, & Pozen, 2004). However, no studies have explicitly examined peer contagion in residential care settings. The importance of filling this knowledge gap is underscored by the prevalence of group placements. Among youths in out-of-home care settings, about 20% are in group-based settings, living with other troubled youths.

Reliance on group care persists despite concerns that have been raised over the effectiveness of this intervention (Barth, 2002; Epstein, 2004; Hair, 2005; Wells, 1991). Because of the inefficiencies of group programs, treatment foster care (TFC) has been developed as an alternative placement. In treatment foster care, a youth is placed individually in a family home with foster parents who receive additional training and support to manage the youth's challenging behaviors. A number of studies have compared outcomes for youth in TFC with group care (Chamberlain & Reid, 1991; Fisher & Chamberlain, 2000). However, previous studies suffer from several limitations, including small sample sizes and high levels of variation in group care models. This study is the first to compare outcomes of a group care and TFC program that both utilize the same therapeutic model.

Research Background and Hypotheses

This dissertation examined the effects of exposure to deviant peers for youth in group care. This project assessed the temporal patterns of externalizing behaviors during residential care and the influence of deviant peers in the living environment. The study

tested the peer contagion hypothesis in residential care and treatment foster care by pursuing the following five aims:

Aim 1: To identify externalizing behavior trajectories for youths following admission to residential treatment;

Aim 2: To assess the relationship between deviant peer density and externalizing behavior trajectory class, controlling for demographics and behavior risk factors;

Aim 3: To compare trajectories of individual externalizing behaviors and the externalizing behavior patterns of proximal peers;

Aim 4: To examine whether individual trajectory classes predict adjustment and discharge outcomes at discharge and six months post-discharge;

Aim 5: To compare delinquency and adjustment outcomes for youth in group care with youth in treatment foster care.

Methodology

This study utilized secondary administrative data from Girls and Boys Town, a large youth-serving agency in the United States. This agency provides both group care and treatment foster care services. Both programs follow the Teaching-Family model, a therapeutic approach with some evidence of its effectiveness.

All youths who were in placement at least 30 days and exited from residential care at the Girls and Boys Town's Home campus or Girls and Boys Town USA treatment foster care sites between June 1, 2002 and December 31, 2005 were included.

For the first four aims, the sample of youth from the group care program was utilized (N=744). The fifth aim compared outcomes for youth from the residential program with outcomes of youth from the treatment foster care program (N=125). Data for both programs were collected at intake to group care, discharge, and six months after leaving care. Additionally, for the youth in group care, daily reports of a youth's serious externalizing behaviors were documented by live-in staff. The frequency of serious externalizing behaviors each month in group care was the outcome of interest in the trajectory analysis.

Latent class growth analyses (LCGA) using Mplus was conducted to develop externalizing behavior trajectories for youths during 12 months in group care (Muthén & Muthén, 2000). Multinomial logistic regression using SAS 9.1 was utilized to identify characteristics of youths and their proximal peer group that significantly differed across trajectory group. In addition, individual trajectory group membership was used to predict discharge outcomes (favorable discharge, return home) as well as outcomes at the six month follow-up (legal/criminal involvement, placement stability, and positive relationships with adults/caregivers). To compare a youth's behavior trajectory to the behavioral trajectory of the other peers in their living unit, LCGA was again conducted to examine the behavior trends within the cottage and whether these mirrored an individual youth's behavior trajectory.

Propensity score matching was used to balance differences in 18 background variables for the samples of group care youth and TFC youth. Propensity score matching is a technique used to reduce bias in comparing two groups that have not been randomly assigned (Rosenbaum & Rubin, 1983). A propensity score is computed for each individual and reflects his/her probability to be assigned to the treatment group given the observed covariates (demographics, placement history, behavior problems, maltreatment history, and family problems). By comparing individuals from different treatment groups with the same or similar propensity scores, causal effects of the treatments can be assessed.

Four matching techniques were utilized in comparing five different youth outcomes. Two outcomes were assessed at discharge (favorable discharge from placement and return home [with biological/ adoptive parents or other relatives]); three outcomes were assessed at six months post-discharge (legal involvement, subsequent formal placement, and being in a home-like setting at follow-up). Following propensity score matching, the resulting groups did not differ significantly in background characteristics and the rates of achieving desired outcomes were compared.

Results

Results provided some evidence for peer contagion. Five trajectory groups emerged to describe youth externalizing behavior patterns during care. Only one group, which was composed of less than 10% of the sample, showed an increase in problem behaviors during time in care. The proportion of proximal peers with diagnosed disruptive behavior disorders was a consistent predictor of an individual youth's trajectory. In addition, younger White males were identified as the subgroup of youths most susceptible to peer contagion and increased problem behaviors during group placement. Individual trajectory group membership was a strong predictor of three outcomes (favorable discharge, return home, and placement stability). Similar to the individual youth trajectory findings, five subgroups were identified to describe the behavior patterns of the proximal peers in a youth's living unit. An individual youth's trajectory was found to be similar to the problem behavior trajectory of their proximal peers in the home.

In comparing outcomes for TFC youths with group care youths, findings did not follow the hypothesis that group care youths would show worse outcomes. Specifically, group care youths were more likely to be favorably discharged, more likely to return home to family following care, and less likely to have had a subsequent formal placement in the six months after discharge. There were no significant differences in regards to involvement in the legal system or being in a homelike setting at follow-up. Across all four propensity score matching algorithms used to compare group care youths with TFC youths, substantive results remained the same. This offers additional support for the findings.

Utility for Social Work Practice

Using innovative methods, this study identified some evidence for peer contagion in group care settings. While most youths in the study maintained low or decreasing problem behaviors during residential treatment, a subgroup of youths did not fare as well. This study demonstrated that it may be possible to predict peer contagion and therefore contain or prevent it. Further, the association between behavior trajectory during care and subsequent outcomes underscores the importance of youth experiences in out-of-home placement.

This study improved upon previous research by holding the treatment model constant in comparing treatment foster care with group care. Contrary to previous research, findings from this study suggested that group care may be more effective than TFC in achieving positive youth outcomes. While these unique results may be partly due to methodological limitations, it is also important to note that the group care program used here is not typical of most group care programs in the United States. The Teaching-Family model utilized in this study is more resource-intensive and evidence-based than most eclectic group care interventions. As such, this model may hold promise in minimizing peer contagion as assessed in this study.

More research is needed on group care practice models to determine effective approaches in working with youths in out-of-home care. Although policy dictates least restrictive placement assignments, it is likely that some youths will continue to require residential treatment at least for short-term interventions. High-quality group care programs should be available to meet the challenging needs of these youths. Subsequent research efforts should identify the critical elements of effective group programs to improve the quality of services for youths in residential settings.

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