Predictors of out-of-home placement following residential treatment

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ABSTRACT

Objective: There is a lack of research examining predictors of out-of-home placement (OOHP) following residential treatment (RT). The current study examined how various child and family factors predict OOHP at discharge and 6-months post-discharge for a RT sample.
Methods: Three hundred and eighty-three children (11.92 years, $SD = 2.63$, 293 boys) with serious mental health disorders were assessed using the Brief Child and Family Phone Interview (BCFPI) and placement information forms at admission, discharge, and 6-months post-discharge from RT.
Results: OOHP at discharge was predicted by older age, OOHP at admission, child welfare involvement, deliberate self-harm, a history of physical abuse, neglect, witnessed domestic violence, and a poor family situation ($p < .05$). At 6-months post-discharge, OOHP was predicted by dual diagnosis, OOHP at admission, child welfare involvement, neglect, and witnessed domestic violence ($p < .05$).
Conclusions: Pre-treatment factors are predictive of OOHP following RT. Identifying these key predictors and developing permanency planning options for children to promote stability and consistency is essential. A systemic evidence-based approach is imperative in promoting resilience for children at risk of OOHP, including family intervention and collaboration with the community.

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1. Introduction

Residential treatment (RT[1]), a type of out-of-home placement (OOHP[2]), provides tertiary care for children with serious mental health disorders (SMHD[3]; St. Pierre, Leschied, Stewart, & Cullion, 2008). OOHP refers to the placement of a child outside of his/her direct family home due to family circumstances that place the child at risk, such as abuse or inadequate care, and/or a child's own developmental and/or behavioral/emotional problems. Examples of OOHP include foster care, kinship care, group homes, RT, inpatient psychiatric care, and correctional facilities (Garnier & Poertner, 2000; Landsverk, Davis, Ganger, Newton, & Johnson, 1996). Controversy exists regarding the usefulness of RT in preventing additional OOHPs and poor outcomes with indications that less restrictive and less expensive treatment options may be more beneficial (Holstead, Dalton, Horne, & Lamond, 2010). Very few research studies examine discharge and post-discharge placements following RT and those that do focus on removal from home due to child welfare concerns or developmental disabilities. This paper examines the extant literature to identify predictors of OOHP for children with mental health and/or co-morbid developmental problems and assesses evidence for these predictors using data collected on those in treatment for these issues.

1.1. Predictors of OOHP

The strongest identified risk factor associated with OOHP is behavior problems, such as aggression, non-compliance, and defiance (Farmer, Mustillo, Burns, & Holden, 2008; Park, Solomon, & Mandell, 2007). For example, Farmer et al. (2008) found that children who were placed in foster care and other OOHPs had more severe behavioral problems than those of intact families. However, many of these children have been exposed to abuse/neglect and related trauma, which is often associated with major mental health problems (Burge, 2007; Heflinger, Simpkins, & Combs-Orme, 2000).

Consistent support for increased rates of placement instability for older children has also been noted (Barth et al., 2007; Farmer, Southerland, Mustillo, & Burns, 2009; James, Landsverk, & Slymen, 2004; Klee, Kronstadt, & Zlotnick, 1997). For example, James et al. (2004) found that children within the child welfare system (CWS[4]) who were greater than 8 years of age were more likely to have an unstable placement pattern. Older children have also been found to have higher rates of behavioral problems than younger children, possibly further influencing the relationship between age and placement

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[1] RT — residential treatment.
[2] OOHP — out-of-home placement.
[3] SMHD — serious mental health disorder.

[4] CWS — child welfare system.

instability (Burge, 2007). Findings related to gender and OOHP, to date, have been inconsistent (Barth et al., 2007; Farmer et al., 2008, 2009; James et al., 2004, 2006; Smith, Stormshak, Chamberlain, & Bridges Whaley, 2001).

Several studies, including those examining RT populations, have shown that prior placement history is associated with current OOHP (Baker, Wulczyn, & Dale, 2005; Farmer et al., 2009; Newton, Litrownik, & Landsverk, 2000). For example, Baker et al. (2005) found that children who were discharged to OOHP following treatment were more likely to have experienced prior psychiatric hospitalization and previous OOHP. Additional risk factors of OOHP following RT include a history of substance use, self-harm, and suicide attempts (Baker et al., 2005; Farmer et al., 2009). Research has also found disability-specific patterns indicating that children with severe developmental disabilities have an increased likelihood of placement instability (Allen, Lowe, Moore, & Brophy, 2007; Pfeiffer & Baker, 1994). Children with more severe and profound levels of intellectual disability also tend to display difficulties with emotion regulation and behavioral control (Allen et al., 2007).

Evidence for the association between family risk factors and OOHP is mixed due to a lack of research focus in this area and little clarity regarding measurement (Farmer et al., 2009; Kortenkamp, Geen, & Stagner, 2004). Findings do suggest, however, that certain family factors such as family functioning (e.g., family conflict, social support, and parenting skills) are related to unstable placement patterns. Specifically, Sunseri (2004) found that children with higher functioning families are eight times more likely to be discharged to less restrictive settings following RT than those with lower family functioning. Conversely, children from families of domestic violence have higher rates of reunification instability (Farmer et al., 2009). Children of caregivers with poor mental health, substance abuse problems, and/or criminal involvement have also been found to be more likely to be placed in OOHP following RT (Baker et al., 2005; Shaw, 2006). These findings demonstrate the sheer vulnerability of children in OOHP. Not only do they tend to have their own mental health problems, disabilities, and histories of placement instability, but they also come from families with histories of abuse and parental mental health problems.

Although numerous factors associated with OOHP have been identified by previous research, very few studies have examined predictors of OOHP following RT. Not all children in RT return to their family home following treatment, although this is the ultimate goal. Knowledge of child and family variables that are associated with OOHP following RT is essential for the development of more tailored interventions to prevent further OOHPs for these children. In this study, the predictive power of various child and family factors on OOHP at discharge and 6-months post discharge from RT was examined. Based on the most influential predictor variables identified in previous research and the variables available for examination, it was hypothesized that being older, prior OOHP, child welfare status, increased behavioral problems, having a history of abuse (physical and sexual) and neglect, substance abuse, intellectual disability and/or family dysfunction would predict OOHP.

2. Material and methods

2.1. Participants

This study used a cohort sample of 6- to 17-year-old children with SMHD who were admitted to a RT facility. The participants were consecutive admissions over a 5-year period at a tertiary mental health care facility in Ontario. At this facility, children with mental health disorders and children with dual diagnoses (i.e., mental health disorder and developmental disability) are treated. Consent was obtained from parents/guardians for their child's data to be used for research purposes. Twenty-seven parents/guardians did not provide consent for

their child's data to be used for research purposes and were thus excluded. A total of 383 children with complete admission and discharge data were analyzed in this study ($M = 11.92$ years, $SD = 2.63$, 293 boys). Of these children, 95 (24.8%) had a dual diagnosis. The remainder had mental health disorders but not a developmental disability.

2.2. Setting

Children were referred to RT through their local community single-point-of-access mechanism. This intake procedure uses standardized clinical measures and a "least intrusive intervention" approach to practice. This process attempts to ensure that adequate community treatment efforts have been exhausted prior to enrolment in RT. All treatment models were based on current best practice, which included structured behavioral milieu and individualized intervention strategies. The living milieu treatment, led by psychiatrists, psychologists, and social workers, promoted interpersonal skill development along with psychotropic medication and psychosocial, family-oriented, and educational interventions.

Individualized plans of care for children were reviewed monthly by the family/guardian, community care coordinator, and clinicians. Discharge dates were flexible, based on the child's progress and needs. The average length of stay for residents was 2.47 months with a range of less than 1 month to 27 months ($SD = 2.40$). However, outpatient services were often utilized both at preadmission and post-discharge. Post-discharge follow-up may have involved outreach assistance in the home or classroom, and ongoing therapeutic contact, including medication monitoring. Active involvement and support of the parent/guardian was essential and indeed mandatory for the child to be admitted. Most children returned home on the weekends during treatment. Including these aspects within the treatment plan ensured easier transition back to a less structured environment following treatment.

2.3. Procedure

This study was approved by the Research Ethics Board (REB) at Western University, London, Ontario, Canada. Consent was sought from caregivers at admission for the use of their children's data for research purposes outside of the agency. Only those who consented were included in this analysis. Data was collected from various measures at three time periods: admission (Time 1), discharge (Time 2), and 6-months post-discharge (Time 3). At Times 1 and 3, the administered measures included the Brief Child and Family Phone Interview (BCFPI) and Service Information Form. At discharge, the Discharge Location Form was completed.

2.4. Measures

The BCFPI provides a measure of the type/severity of children's problems. It is a standardized parent phone-interview consisting of 81 forced-choice questions. This tool consists of five broadband subscales: Externalizing, Internalizing, Total of 6 Mental Health Domains, Global Functioning, and Global Family Situation. The subscales are measured using normative t-scores. Children with t-scores of 70 and above are considered to be in the clinical range (Cunningham, Pettingill, & Boyle, 2006). The BCFPI also contains other items that can be used to measure the presence or absence of various behavioral and abuse events. Items such as deliberate self-harm, physical abuse, sexual abuse, neglect, and witnessed domestic violence were included in this study based on past studies that have found these to be important predictors of OOHP. These items were interpreted by the parents/caregivers and answered accordingly, based on their understanding of the item. The psychometric properties of the BCFPI have been established and are based on the mapping of items to the Diagnostic and Statistical Manual of Mental Health Disorders criteria (Cunningham et al., 2006). A detailed