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Research article

# Unstable child welfare permanent placements and early adolescent physical and mental health: The roles of adverse childhood experiences and post-traumatic stress

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ABSTRACT

Although researchers have found that child welfare placement disruptions are associated with elevated youth physical and mental health problems, the mechanisms that explain this association have not been previously studied. The present study built on a previous investigation of the physical and behavioral consequences of long-term permanent placement patterns among youth who participated in the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN). The current investigation (n = 251) aimed to (a) report the early adolescent living situations of youth with different long-term placement patterns, and (b) to delineate the roles of adverse childhood experiences (ACEs) and post-traumatic stress (PTS) reactions in the association between unstable long-term placement patterns and physical and mental health problems during the transition to adolescence. Information about youth's living situations, ACEs, and physical and mental health was gathered prospectively from child protective services records and biannual caregiver and youth interviews when youth were 4–14 years old. The majority of youth remained with the same caregiver during early adolescence, but youth with chronically unstable permanent placement patterns continued to experience instability. Path analyses revealed that ACEs mediated the association between unstable placement patterns and elevated mental, but not physical, health problems during late childhood. Additionally, late childhood PTS mediated the association between unstable placement patterns and subsequent escalations in physical and mental health problems during the transition to adolescence. Findings highlight the importance of long-term permanency planning for youth who enter the child welfare system and emphasize the importance of trauma-focused assessment and intervention for these youth.



## 1. Introduction

More than 650,000 children and adolescents were served in non-relative, non-adoptive child welfare placements (i.e., foster care) in 2014 (Department of Health and Human Services and Children's Bureau, 2015). The majority of youth (i.e., children and adolescents under the age of 18) involved in the child welfare system are victims of child abuse and/or neglect

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and many have been exposed to additional adverse childhood experiences (ACEs), such as family substance use, mental health problems, incarceration, etc. (Bruskas & Tessin, 2013; Jamora et al., 2009). In addition to these potentially traumatic events, after being placed in foster care, many youth experience disruptions in their living arrangements (e.g., multiple caregiver and placement changes) that may occur early (e.g., during the first 12–18 months after initial entry into the child welfare system) and can persist for many years, despite legislative mandates requiring that they are in permanent placements (Villodas, Litrownik, Newton, & Davis, 2016; Webster, Barth, & Needell, 2000; Wulczyn, Kogan, & Harden, 2003). Previous researchers have identified an association between both early (i.e., within 18 months of placement) and long-term (i.e., more than 18 months after placement) permanent placement disruptions and youth physical and mental health problems (Aarons et al., 2010; Newton, Litrownik, & Landsverk, 2000; Takayama, Wolfe, & Coulter, 1998; Villodas et al., 2016). However, the mechanisms that link these disruptions to youth's physical and mental health have not been previously investigated. The present study examined the roles of ACEs and post-traumatic stress (PTS) reactions in the association between childhood permanent placement disruptions and physical and mental health problems during the transition to early adolescence.

### 1.1. Child welfare placement patterns

The instability of youths' placements in the child welfare system and patterns of child welfare placement changes have been well documented (Oosterman, Schuengel, Slot, Bullens, & Doreleijers, 2007; Wulczyn et al., 2003). Studies of early (e.g., with 18 months of placement) and long-term permanent (e.g., 3 to 8-year) placement patterns have identified the number, timing, and/or type of disruptions that youth experienced after their entry into or exit out of out-of-home care (James, Landsverk, & Slymen, 2004; Villodas et al., 2016; Wulczyn et al., 2003). These studies have used qualitative and quantitative (i.e., latent variable mixture modeling) methods to identify groups of youth with different patterns of placements, such as those who experienced many disruptions after initial placement, but eventually experienced stable placements, those who experienced continual disruptions in their placements after entering the child welfare system, those who entered the child welfare system at an older age and experienced ongoing disruptions in their placement, etc. Taken together, these studies demonstrate that, while some youth who enter the child welfare system maintain stable placements, a subset of youth continue to change placements over time.

### 1.2. Consequences of placement disruptions

A substantial body of literature has demonstrated that youth with more child welfare placement disruptions have more physical health (e.g., skin conditions, asthma; Takayama et al., 1998), and emotional and behavioral problems (e.g., depression, aggression; Aarons et al., 2010; Newton et al., 2000). A number of researchers have noted that youth's prior physical and mental health problems lead to more child welfare placement changes after entering foster care (Aarons et al., 2010; Casanueva et al., 2014; Fisher, Stoolmiller, Mannering, Takahashi, & Chamberlain, 2011; Newton et al., 2000). However, researchers have found that this association is bidirectional, as unstable short and long-term child welfare placement patterns lead to increases in physical and behavioral problems after accounting for prior levels (Aarons et al., 2010; Newton et al., 2000; Villodas et al., 2016).

### 1.3. The roles of adversity and trauma

In addition to experiences of child abuse and neglect prior to child welfare entry, researchers have reasoned that additional traumatic stress caused by repeated separations from caregivers and unstable living arrangements could exacerbate children's physical and mental health problems (Bruskas, 2008; Casanueva et al., 2014). For example, it is possible that repeated disruptions in caregiver-youth attachments experienced by youth with multiple child welfare placement changes are traumatic events and contribute cumulatively to the expression of PTS reactions, which may manifest in a variety of physical and mental health problems (Cromer & Villodas, 2016; Graham-Bermann & Seng, 2005; Teague, 2013; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005).

On the other hand, it is important to consider additional ACEs to which children with multiple placement disruptions could be exposed and which could also contribute to the development of PTS reactions. Researchers have found that children who continue to experience instability in their living situations often also experience a number of ACEs, such as caregiver substance use, mental health problems, and incarceration, as well as family violence (e.g., caregiver or child victimization) and neglect (Festinger, 1996; Frame, 2002; Johnson-Reid, 2003; Terling, 1999; Weiner, Leon, & Stiehl, 2011). These ACEs often co-occur with one another and the accumulation of ACEs has been directly linked to a number of negative physical and mental health outcomes, including increased PTS, aggression, depression, anxiety, diseases, etc. (Dube, Felitti, Dong, Giles, & Anda, 2003; Schilling, Aseltine, & Gore, 2007; Swopes, Simonet, Jaffe, Tett, & Davis, 2013). However, the respective roles of ACEs and PTS in the association between child welfare placement disruptions and these physical and mental health problems remain unclear.

Recent transdiagnostic models of developmental trauma, which are based on a developmental psychopathology perspective, have emphasized the disruptive effects of an accumulation of traumatic stressors (e.g., ACEs) on the development of emotional (e.g., restricted range of affect), cognitive (e.g., hypervigilance to threat), physiological (e.g., arousal in ambiguous or non-threatening situations), and neurobiological processes associated with PTS reactions in children (Teague, 2013; van