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PLACEMENT INSTABILITY, PERCEIVED SOCIAL SUPPORT, AND INTERNALIZING SYMPTOMS IN YOUTH IN THE CHILD WELFARE SYSTEM

Michelle Cusumano

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Michelle Cusumano

Date Submitted _____ Date Approved_____

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Michelle Cusumano Andrea Bergman, Ph.D.

ABSTRACT

PLACEMENT INSTABILITY, PERCEIVED SOCIAL SUPPORT, AND INTERNALIZING SYMPTOMS IN YOUTH IN THE CHILD WELFARE SYSTEM

Michelle Cusumano

High rates of youth in the child welfare system (CWS) experience placement instability, or frequent moves between household, institution, or placement (Fisher et al., 2013). Placement instability has been shown to predict subsequent internalizing symptoms regardless of the maltreatment type, severity, or frequency experienced by the child in foster care (McGuire et al., 2018). Frequent moves between biological parents, foster or kinship caregivers, or group homes may detrimentally affect youth's social support networks, which are known to serve as a protective factor for maltreated children and adolescents (Folger & Wright, 2013). The current study aims to examine longitudinally whether perceived support from current primary caregivers and/or peers mediate the link between number of home placement moves and internalizing symptoms in youth referred to the child welfare system. It was hypothesized that there would be significant indirect effects from placement instability to internalizing symptoms via both perceived current caregiver support and perceived peer support. Secondary data analysis was performed using data collected from 1,333 adolescents as part of the National Survey of Child and Adolescent Wellbeing (NSCAW). Perceived current caregiver support was assessed using project-developed questions and perceived peer support was measured using an adapted version of the Children's Loneliness and Dissatisfaction Scale (Asher et al., 1984). A structural equation model (SEM) was utilized to test whether there were indirect effects of placement instability (reported by the child's caseworker) between baseline and

Wave 3 (18 months after initial CWS investigation) and internalizing symptoms at Wave 4 (36 months after initial CWS investigation) via perceived current caregiver support and perceived peer support (both measured at Wave 3). Results showed a significant indirect effect from placement instability to internalizing symptoms via current caregiver support only. Training and intervention implications for biological parents and substitute caregivers involved with the child welfare system are discussed.

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INTRODUCTION

Each year, hundreds of thousands of children and adolescents in the United States are placed under the care of the child welfare system after a report of child maltreatment. Despite efforts by the child welfare system to keep children with their biological families, children and adolescents often experience placement instability, or frequent moves between household, institution, or placement (Fisher et al., 2013). Reports vary in terms of the average number of placement moves children experience during their time in out-of-home, or substitute, care (e.g., foster care, kinship care, group home, residential homes, etc.). Rubin et al., (2004) estimated that about 33% of youth transition to three or more placements, whereas other estimates indicate that a third of youth experience eight or more placement moves before achieving placement stability or aging out of the child welfare system (Pecora et al., 2005). Short and long-term consequences of placement instability have been studied thoroughly, demonstrating a robust link between placement instability and poor negative mental health outcomes (Oswald et al., 2010). Some researchers have posited that placement instability increases the risk of psychological problems due to repeated disruption to a child's social and emotional support networks (McGuire et al., 2018). The current study aims to examine longitudinally whether perceived social support mediates the link between number of home placement moves and internalizing symptoms in youth referred to the child welfare system.

Placement Instability and Mental Health Outcomes

Maltreated youth in out-of-home care exhibit poorer outcomes than comparison groups across several areas of functioning. Research has shown that the prevalence of a psychological disorder is almost four times greater amongst youth in the child welfare

system than the prevalence among the general population of children and adolescents (Bronsard et al., 2016). A review of 32 articles on the mental health of children with involvement in the child welfare system found that youth in foster care have a high prevalence of comorbid internalizing and externalizing disorders, as well as developmental delays (Oswald et al., 2010). Further, children who have experienced out-of-home care demonstrate lower academic achievement performances (Berger et al., 2015) and have higher involvement with the juvenile justice system (Cutuli et al., 2016). Ryan and Testa (2005) demonstrated that although one out-of-home placement did not significantly increase the risk for greater psychological problems, multiple moves between placements did significantly increase the risk for internalizing and externalizing symptoms, even after controlling for behavior problems before entry into foster care. Rubin et al. (2007) replicated these findings, showing that youth in the child welfare system experienced high rates of placement disruption, which had a significant impact on their mental health outcomes, even after controlling for preexisting symptoms at baseline. Additional longitudinal research suggests that multiple placement changes as well as characteristics of the living situation predicted subsequent internalizing symptoms (Rosenthal & Villegas, 2010). McGuire et al. (2018) sought to further elucidate the relationships among maltreatment, placement instability, and mental health by demonstrating that placement stability robustly predicted subsequent internalizing and externalizing symptoms, regardless of the maltreatment type, severity, or frequency experienced by the child in foster care. Furthermore, studies on the mental health outcomes of children who have achieved placement stability (i.e., reunification, adoption, or long-term substitute care) show that stability serves as a protective factor in the

emotional and behavioral functioning in youth (Aarons et al., 2010; Proctor et al., 2010). Researchers have suggested that greater risk of poor psychological outcomes for youth in out-of-home care may be linked to their unstable and uncertain sources of social support. However, no study to date has demonstrated whether perceived social support explains the relation between placement instability and poor mental health outcomes such as internalizing symptoms.

Caregiver and Peer Support and Internalizing Symptoms in Maltreated Youth

Children and adolescents who experience placement disruption face repeated separation from both biological and foster caregivers as well as others in their social network such as siblings, extended families, and peers. Frequent placement moves may result in youth being disconnected from a relationship in which they felt supported and cared for, and the fear of future disruptions may decrease the child's motivation to form new supportive relationships. In a study with maltreated adolescents in foster care, adolescents named significantly fewer members in their social networks than comparison youth (Negriff et al., 2014). Additionally, youth in foster care report lower quality peer relations than children raised by their biological families (DeLuca et al., 2018). Although social support has not been investigated as a mediator between placement instability and internalizing symptoms, the importance of social support for mental health outcomes of maltreated children has been studied thoroughly. Both family and peer support has been shown to be a protective factor in the development of internalizing symptoms in adolescents who have experienced maltreatment (Folger & Wright, 2013). Chesmore et al., (2017) showed that supportive and secure relationships with biological parents and with substitute caregivers each explain a significant proportion of variance in the

presence of internalizing symptoms in foster children, above and beyond demographics and characteristics of maltreatment and placement. In a study with 188 adolescents, Cooley et al., (2015) demonstrated a significant relationship between youths' perceptions of foster caregiver support and levels of internalizing symptoms. Additionally, a recent study demonstrated that peer support moderated the association between complex trauma and internalizing symptoms (Yearwood et al., 2019). When examining family and peer support together in one measure and construct, Salazar et al. (2011) found that support from family and peers had a direct effect on depression, as well as partial mediation effects on the relation between maltreatment and depression in adolescents in foster care. Longitudinal studies have also demonstrated that social support mediates the relationship between child abuse history and internalizing symptoms in adulthood (Sperry & Widom, 2013). Despite the exclusion of placement characteristics in the social support literature, these studies suggest that perceived support from both caregivers and peers serves as an influential protective factor for internalizing symptoms for maltreated youth in substitute care.

Limitations of Extant Literature

Much of the research examining placement instability has focused on identifying predictors of instability to facilitate prevention (Hill, 2012; Sattler et al., 2018; Webster et al., 2000) but almost none has sought to explain the association between placement instability and internalizing symptoms. This relationship is imperative to understand because despite the child welfare system's efforts to limit placement disruptions and the growing knowledge of risk factors for instability, it is still quite common for children to frequently move between placements. Further, most children display high levels of psychopathology at the onset of their

involvement with the welfare system, which remain stable or worsen during a child's time in out-of-home care (Goemans et al., 2015). Therefore, researchers must better understand the mechanisms by which placement instability leads to psychological symptoms in order to intervene more effectively. The extant literature has indicated support for social support as a partial mediator between maltreatment characteristics and internalizing symptoms. However, no studies have examined whether current caregiver and or peer support explain the relation between placement instability and internalizing symptoms. An understanding of the pathways between placement instability, caregiver support, peer support, and internalizing symptoms will assist case workers and other professionals in the child welfare system to intervene with children and caregivers early and prevent detrimental trajectories.

Current Study

The current study will address the following aims: (1) replicate research findings regarding the relation between placement instability and internalizing symptoms, (2) examine whether either perceived current caregiver support and or perceived peer support mediate(s) the association between placement instability and internalizing symptoms in a nationally representative sample of adolescents in the child welfare system.

Hypothesis. There will be significant indirect effects from placement instability to internalizing symptoms via both perceived current caregiver support and perceived peer support after accounting for predictors of internalizing symptoms well-established in the literature.

METHODS

Participants

Survey data were collected from 1,333 adolescents, their current caregivers, and their caseworkers as part of the National Survey of Child and Adolescent Wellbeing (NSCAW), a nationally representative longitudinal study designed to examine the wellbeing of children and families and their experiences with the child welfare system in the United States (Dowd et al., 2004). Under contract from the Administration for Children and Families, NSCAW recruited children and caregivers from 97 counties nationwide who were referred to the child welfare system between October 1999 to December 2000 after a report of maltreatment. Participating children were between infancy and 14 years of age at the time of sampling. Families were included in the sample regardless of whether the referral report of maltreatment was substantiated or unsubstantiated. For the current study, the sample was restricted to youth who were 11-17 years of age at Wave 3 because this age group was asked to report on their relationship with their current caregiver. Additionally, this age group experiences more placement instability than younger children (Sattler et al., 2018). In the final sample, 46% of youth identified as Caucasian or White, 27% identified as Black or African American, 13% identified as Hispanic, 3% identified as Multiracial, 3% identified as Other (e.g., Hawaiian/Pacific Islander, Native American etc.) and 1% identified as Asian. Fifty-five percent of current caregivers reported a yearly household income of $24,999 or less.

Procedure

NSCAW researchers used a two-stage stratified design to select the NSCAW sample. The first stage entailed dividing the U.S. into nine sampling strata. More

specifically, the eight states with the highest child welfare caseloads made up eight of the strata. The ninth stratum consists of the remaining 42 states and the District of Columbia. Within each of these strata, researchers formed and identified primary sampling units, defined as the geographic location serviced by one child protective services agency (Dowd et al., 2004). Participating families were selected from 92 primary sampling units around the United States. After agencies were recruited for the study, field representatives mailed introductory letters to families and contacted them to assess interest, obtain consent, and schedule interviews. Survey data were collected from children and their current and former caregivers, teachers, and case workers at baseline (approximately 6 months after the close of the initial investigation) and follow up periods 12 months (Wave 2), 18 months (Wave 3), 36 months (Wave 4), and 59-96 months later (Wave 5).

Measures

Demographics. Current and former caregivers were asked to report on child and caregiver demographic characteristics such as race/ethnicity, age, gender, household income, current placement type, and household characteristics.

Placement Instability. Placement instability was defined by the number of placement moves between baseline and Wave 3. The number of placements variable was derived from questions asked to each child's caseworker. This procedure was consistent with previous methods outlined in Casanueva et al. (2014). At each wave of data collection, caseworkers were asked "Where is the child currently living?". Interviewers then probed about child placement changes for up to 25 moves since the last wave of data collection. Following the procedures of Howard et al. (2011), a placement change was

operationalized as a change in household for at least 7 days without the original caregiver. Number of placement changes between Wave 1 and Wave 3 were summed to create the Number of Placements variable.

Perceived Current Caregiver Support. Current caregiver support was measured using the following project-developed questions: "How much do you think (primary current caregiver) cares about you?" and "How close do you feel to your current caregiver?". Each of these items was measured on a 5-point scale from "Not at all" to "Very much" and summed to create a total score (NSCAW, 2009), with a higher score indicating higher support.

Perceived Peer Support. The Children's Loneliness and Social Dissatisfaction Scale (Asher et al., 1984) measures a child's levels of social support and loneliness. Sample items include, "I have nobody to talk to at school" and "I have lots of friends at school". Each item is measured on a five-point scale from "Never" to "Always true". Appropriate items were reverse coded, and all items are summed to create a total score, with a higher score indicating higher peer support. The full 24-item measure demonstrates acceptable internal consistency ($\alpha = .90$) and reliability (split-half correlation between forms = 0.83; Asher et al., 1984). For NSCAW, this measure was shortened to 16 questions and adapted for older youth. The available NSCAW database includes only the total scores of the adapted Children's Loneliness and Social Dissatisfaction Scale rather than each item. Thus, psychometric analyses were not conducted on the NSCAW sample for this measure.

Internalizing Symptoms. Youth internalizing symptoms were measured at baseline and Wave 4 using the Internalizing Subscale of the Youth Self-Report (YSR; Achenbach

and Rescorla, 2001), which was derived from the Child Behaviour Checklist (CBCL; Achenbach, 1991). This measure is made up of 118 items that assess emotional and behavioral difficulties in adolescents. The internalizing subscale includes 37 items on a three-point scale from, “Not true” to “Very true or often true”. The total raw score on the Internalizing Subscale was used as the criterion variable. The YSR in the NSCAW sample demonstrates acceptable internal consistency ($\alpha = 0.96$) and test-rest reliability ($r = 0.80$; NSCAW, 2009).

Analytic Strategy

Missing value analyses revealed 18% missing data on the perceived peer support variable at Wave 3, 15% missing data on the perceived current caregiver support variable at Wave 3, and 4% missing data on the internalizing symptoms variable at Wave 4. Characteristics such as race/ethnicity, age, household family income, maltreatment type, and placement type did not significantly predict missingness on these measures. Maximum likelihood estimation, the most commonly used method for estimation in structural equation modeling (Yuan & Bentler, 2007), was employed with robust standard errors to estimate the model. Additionally, a logarithmic transformation was applied to perceived current caregiver support to correct for high negative skewness. Covariates were selected based on constructs previously identified in the literature as being associated with internalizing symptoms in maltreated youth in substitute care. Gender and placement type at Wave 3 were selected as covariates as they have been shown to predict to internalizing symptoms (Danielson et al., 2005; Yanfeng et al., 2018). Placement type at Wave 3 included biological homes (74%), kinship homes (8%), foster homes (12%),

and group homes or other (7%). Additionally, level of internalizing symptoms at baseline was controlled for in the model.

Upon completion of preliminary analyses, a structural equation model was examined in R Studio to test whether perceived current caregiver support and perceived peer support mediated the association between number of placements from baseline to Wave 3 and subsequent internalizing symptoms at Wave 4. Bias corrected bootstrapping was utilized to analyze indirect effects as this method is statistically more powerful than older methods of mediation analysis (Baron & Kenny, 1986).

RESULTS

Preliminary Results

Descriptive statistics and bivariate correlations among study variables are presented in Tables 1 and 2. The number of placement moves between baseline and Wave 3 ranged from 0 to 7, with about 63% of the sample never having been placed in temporary care outside of the home during that time period. Placement instability was significantly negatively correlated with perceived current caregiver support only. Perceived current caregiver support was significantly positively correlated with perceived peer support and significantly negatively correlated with internalizing symptoms at Wave 4. Perceived peer support was also significantly negatively correlated with Wave 4 internalizing symptoms. Among the covariates, consistent with prior research (Goemans et al., 2015), internalizing symptoms at baseline were significantly positively correlated with internalizing symptoms at Wave 4. Gender was also significantly correlated with internalizing symptoms at Wave 4, with females experiencing higher levels of symptoms. Placement type was unexpectedly not significantly related to internalizing symptoms.

Direct and Indirect Effects of Study Variables.

A structural equation model (SEM) was used to test whether there were indirect effects of placement instability between baseline and Wave 3 and internalizing symptoms at Wave 4 via perceived current caregiver support and perceived peer support (both measured at Wave 3). Analyses showed significant direct pathways from placement instability to perceived current caregiver support ($B = .10$, $SE = .01$, $\beta = .21$, $p < .01$), from perceived current caregiver support to internalizing symptoms ($B = 1.40$, $SE = .42$, $\beta = .10$, $p < .01$), and from perceived peer support to internalizing symptoms ($B = -0.18$,

SE = .03, β = -0.17, $p < .01$). The pathways from placement instability to internalizing symptoms and from placement instability to perceived peer support were not significant. In terms of covariates, the direct pathway from internalizing symptoms at baseline to internalizing symptoms at Wave 4 was significant (*B* = 26.94, *SE* = 3.05, β = .37, $p <$ .01), as was the direct pathway from gender to internalizing symptoms at Wave 4 (*B* = .69, *SE* = .11, β = .18, $p < .01$). In contrast with previous research, the pathway between placement type and internalizing symptoms at Wave 4 was not significant. Results showed a significant indirect effect from placement instability to internalizing symptoms via perceived current caregiver support (*B* = .13, *SE* = .04, β = .02, $p < .01$; Figure 1). There was no significant indirect effect of placement instability to internalizing symptoms via perceived peer support.

DISCUSSION

The current study sought to replicate research findings regarding the relation between placement instability and internalizing symptoms and examine whether perceived current caregiver support and or perceived peer support mediate the association between placement instability and internalizing symptoms. It was hypothesized that there would be significant indirect effects from placement instability to internalizing symptoms via both perceived current caregiver support and perceived peer support. Results showed a significant indirect effect from placement instability to internalizing symptoms via current caregiver support only.

Placement Instability, Perceived Current Caregiver Support, and Internalizing Symptoms

Expanding upon the child maltreatment literature, this was the first study to examine and compare caregiver and peer support as mediators between home placement instability and internalizing symptoms. As child maltreatment research would suggest, this study provided support for the hypothesis that perceived support from a child's current caregiver explains the association between number of placement changes and levels of internalizing symptoms, even after controlling for other factors shown to predict these symptoms. This finding implies that to protect the mental health of youth who experience placement instability, the child welfare system should focus their efforts on both achieving stability and fostering supportive and trusting relationships between youth and their temporary, substitute, or adoptive caregivers, through evidence-based, trauma-informed psychoeducation and intervention. These findings also emphasize the necessity of repairing relationships with perpetrating biological parents, providing effective parent

training, and preparing biological parents and children for reunification when clinically indicated.

Placement Instability, Perceived Peer Support, and Internalizing Symptoms

Consistent with previous research (Folger & Wright, 2013), the current study demonstrated a direct effect of perceived peer support on subsequent internalizing symptoms. However, placement instability did not have a significant direct effect on levels of peer support, suggesting that youth may either maintain relationships with peers they moved away from or find new sources of peer support after switching placements. Contrary to the hypothesized outcome, considering the model as a whole, this study does not provide evidence for peer support as a mediator between placement instability and internalizing symptoms. This finding suggests that although peer support is a significant predictor of subsequent internalizing symptoms for maltreated youth, the focus the child welfare system's attention and resources should be placed on evidence-based parent training to ensure youth will be placed with caregivers who have tools and training to care for their physical and emotional needs and be an effective, trauma-informed caregiver.

Implications for Biological Parent Training and Intervention

Most adolescents in the current study remained with their biological caregivers during the study period and reported high levels of perceived caregiver support. However, many children and adolescents experience family dysfunction and strained relationships with offending caregivers which may worsen after experiencing placement instability. After a substantiated reported of maltreatment, families qualify for in-home or community-based services. Depending on the reason for the report, families may receive

family therapy, parent training, substance abuse treatment, or other services designed to increase the safety of the home and improve the family's ability to care for their children (Children's Bureau, 2021). The child welfare system has made concerted efforts to integrate evidence-based interventions into child welfare services over the last few decades (Annie E. Casey Foundation, 2018). However, there is still much work to be done including bolstering dissemination and implementation of evidence-based interventions, studying multidimensional outcomes of those approaches, reducing racial disparities in the child welfare system, and using a multidisciplinary system of trauma-informed care to improve outcomes (Landsman, 2015). The dissemination and efficacy of in-home services with biological parents and children have been particularly challenging to study because the content, populations, and interventions used differ greatly between and within states (Landsman, 2015).

Considering the evidence that caregiver support partially explains the association between maltreatment and internalizing symptoms, as well as the association between placement instability and internalizing symptoms, repairing a children's relationship with their parents so that they feel supported should be a main target for evidence-based interventions implemented in in-home and community services. Alternative for Families: Cognitive Behavioral Therapy (AF-CBT) is a trauma-informed evidence-based intervention designed for youth and caregivers in families dealing with physical conflict and aggression or child physical abuse (Kolko, 1996). This intervention aims to strengthen child-parent relationships, improve healthy parenting behaviors, reduce physical force, and foster child and family safety and welfare (Kolko, 1996). Researchers must continue to train professionals in child welfare agencies to implement and

disseminate interventions like AF-CBT, which has demonstrated both efficacy in reducing child abuse potential and effectiveness in the child welfare system, to improve relationships and increase family stability, safety, and wellbeing (Kolko, 1996; Kolko et al., 2012).

Implications for Foster Caregiver Training and Intervention

The finding that perceived caregiver support mediates the association between placement instability and internalizing symptoms in youth also has significant implications for the training and support of substitute and adoptive caregivers of children who have experienced placement instability. Pre-service training, or training foster caregivers receive before caring for a child, is federally mandated and most states mandate the use of a particular training curriculum (Dorsey et al. 2008). The most widely used foster parent training programs around the United States are Model Approach to Partnerships in Parenting (MAPP) and Foster Parent Resources for Information, Development, and Education (PRIDE; Dorsey et al., 2008). A review of the evidence base for pre-service and in-service (i.e., training and support for caregivers while actively caring for a child) foster parent training found that the most commonly administered training programs for decades have "virtually no empirical support" (Dorsey et al., 2008, p. 1,412). The very few studies that were conducted on these programs showed inconsistent results regarding frequency of parenting behaviors and child mental health outcomes (Dorsey et al., 2008). Until very recently, the literature on evidence-based training for substitute caregivers has been significantly limited due to a number of methodological issues. Because the standards for foster parent training differ widely across states, the trainings included in meta-analyses and reviews have varied in content

and dose of training (Dorsey et al., 2008), making it difficult to determine efficacy and value. Additionally, many studies examining the efficacy of training programs lack control groups, rely solely on single case studies and case records, or measure only caregiver satisfaction as the outcome (Dorsey et al., 2008; Rork & McNeil, 2008). The literature base for individual foster and kinship caregiver trainings has improved somewhat in quality and quantity in recent years. Studies on another widely used program, KEEP (Keeping Foster and Kinship Parents Trained and Supported) demonstrated improvements in child internalizing and externalizing symptoms as well as placement permanency outcomes, but not parenting behaviors (Greeno et al., 2016). With the absence of significant change in parenting behaviors and the lack of a control group, the mechanisms by which the KEEP program improved child psychopathology and permanency outcomes are unclear. Additionally, efforts have been made to adapt evidence-based parenting programs such as Parent-Child Interaction Therapy (Mersky et al., 2015), Triple P – Positive Parenting Program (Job et al., 2020), and Staying Connected with Your Teen (Barkan et al., 2014; Storer et al., 2012) to promote relationship building and connection between youth and foster caregivers and improve youth mental health outcomes. However, these programs have not been widely utilized or studied in the child welfare system and need more replicated support for their efficacy with these samples. Based on the results of this study, parent trainings for foster and kinship caregivers must go beyond fundamental behavior change principals and include trauma-informed psychoeducation on the effects of placement instability and the importance of fostering supportive relationships.

Limitations of Current Study

The findings of the current study should be interpreted in light of several noteworthy limitations. Other variables known to contribute to internalizing symptoms in this population, such as placement with siblings (Rock et al., 2013), maltreatment type (McGuire et al. 2018), time spent in current placement (Rock et al., 2013), and additional child maltreatment experienced during the study period (Salazar et al., 2011), were excluded to prevent overidentification of the model. Additionally, most of the participants in this study were not transferred to an out-of-home placement during the time period in question, meaning the number of placements variable was highly positively skewed toward 0. This issue is notable as there was not an equal comparison of adolescents in their biological homes versus adolescents in out-of-home placements.

Another critical limitation to consider is the use of a non-validated measure of perceived current caregiver support. Due to the length of the interviews at each wave, project-developed questions were used to assess adolescents' perception of support from their caregiver. This brief, two question measure is not an evidence-based assessment and, therefore, adequate estimates of reliability and validity cannot be established (Hunsley & Mash, 2007).

Finally, data used in the current study were collected nearly 20 years ago. Since the early 2,000's there has been considerable change in the child welfare system. Efforts have been made over the past two decades by most states to increase stability in caregivers by utilizing kinship care whenever possible, improving their child and caregiver matching system, providing respite care and dedicated foster caregiver hotlines for crisis assistance, connecting foster caregivers through support groups, and

disseminating trauma-informed programming (Blakey et al., 2012; Jedwab et al., 2019). For example, participation in Resource Parent Curriculum, a workshop promoting trauma-informed parenting for substitute caregivers, led to improvements in trauma-informed parenting, parenting self-efficacy, and tolerance of child misbehavior, regardless of demographic characteristics (Murray et al., 2019). Although the child welfare system has moved toward evidence-based procedures over the past several years, there is still much work to be done. Substitute caregivers still request better preparation and training, more emotional and professional support for their own caregiver strain, and better access to and knowledge about services available to them and their foster child (Barnett et al., 2017).

Directions for Future Research

Several evidence-based family interventions have demonstrated increases in placement stability and trauma-informed parenting behaviors, as well as improvements child psychological outcomes. Although the child welfare system promotes evidence-based interventions, it is unclear whether agencies are utilizing these approaches, and if so, if they are maintaining fidelity to these programs. Additional longitudinal research is needed to better understand which interventions are being utilized in the field, whether they increase levels of support and communication between caregivers and youth, and whether they significantly promote positive mental health outcomes. More studies are needed on the dissemination and effectiveness of interventions in the child welfare system.

Evidence for the most commonly used pre-service and in-service foster programs is significantly lacking (Cooley et al., 2019), and strong evidence-based programs have

not been adopted and widely used throughout the country. The results of the current study demonstrate the importance of adolescents' perceived support from their caregivers, yet this construct is rarely assessed as an outcome in studies with biological and foster caregivers. Future research must assess the efficacy of training for caregivers and specifically whether these trainings foster supportive caregiver-child relationships for children who have experience placement instability. Additionally, more literature is needed on training with different types of caregivers. Research has shown that the efficacy of trauma-informed trainings has differed between foster caregivers and kinship caregivers (Sullivan et al., 2015). Research with with kinship caregivers is even more scarce, as these caregivers are less likely to receive any training (Dorsey et al., 2008). This finding is especially problematic as youth placed with kin are least likely to access mental health services (Dorsey et al., 2008). Finally, additional research is needed on the efficacy of these programs with differing ethnic and racial groups to address the racial disparity in the child welfare system (Dettlaff & Boyd, 2020).

Table 1

Descriptive Statistics of Study Variables

Variable	*n*	*M*	*SD*
Number of Placement Moves between W1 and W3	1,333	.73	1.19
Perceived Current Caregiver Support at W3	1,135	8.73	1.85
Perceived Peer Support at W3	1,094	43.04	7.20
Internalizing Symptoms at W4	1,280	10.24	7.90

Note. W = Wave. Maximum likelihood estimation with robust standard errors was used, resulting in the final sample size of N = 1,333.

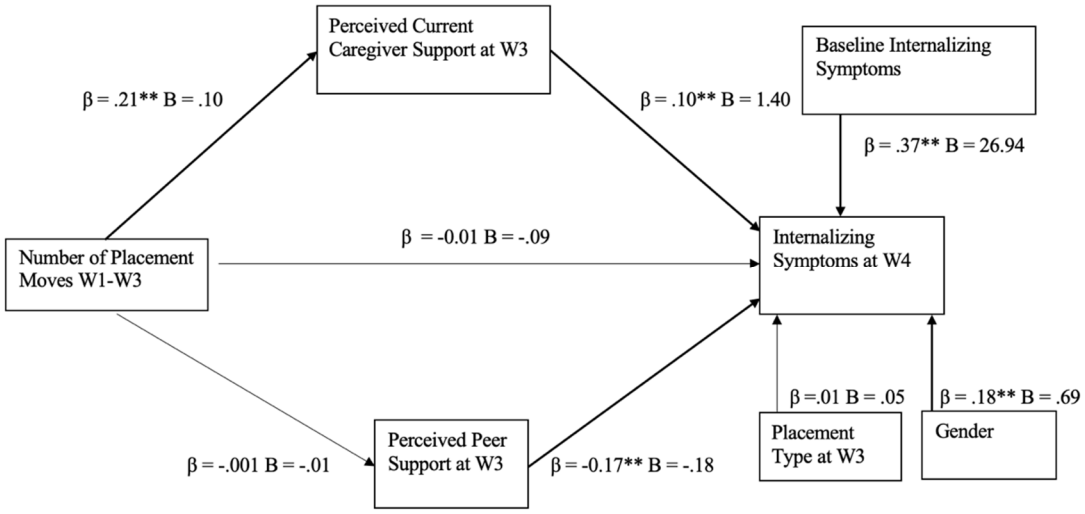
Table 2

Spearman Correlations Among Study Variables

Variable	1	2	3	4	5	6	7
1. Number of Placement Moves Between W1-W3	-	-.216**	.004	.039	.085**	.013	.609**
2. Perceived Current Caregiver Support W3		-	.092**	-.140**	-.169**	-.006	-.229**
3. Perceived Peer Support W3			-	-.241**	-.246**	.001	-.045
4. Internalizing Symptoms W4				-	.420**	.208**	.043
5. Internalizing Symptoms W1					-	.116**	.137**
6. Gender						-	-.048
7. Placement Type							-

Note. W = Wave. ** $p < .01$.

Figure 1. Placement instability contributes to greater internalizing symptoms via perceived current caregiver support



Note. Bold lines indicate significant pathways.

Appendix A

Closeness with Caregiver Interview

1. How close do you feel to your [CAREGIVER A]? Would you say...

   1 = not at all
   2 = a little bit
   3 = somewhat
   4 = quite a bit, or
   5 = very close?

2. How much do you think [he/she] cares about you? Would you say...

   1 = not at all
   2 = very little
   3 = somewhat
   4 = quite a bit, or
   5 = very much?

Appendix B

Loneliness and Dissatisfaction Scale (Interview Adapted for NSCAW)

Now I am going to read you different sentences and for each one I want you to tell me how often these things are true about you. For each sentence, pick one answer from this card.

For example, suppose I read the sentence "I like to do homework and then I ask you "How often is this true about you?" If you never like to do homework, you would tell me "never". If you hardly ever like it, tell me "hardly ever". If you sometimes like it, tell me "sometimes". If you like it most of the time, tell me "most of the time". If you always like to do homework, tell me "always".

1 = Never
2 = Hardly Ever
3 = Sometimes
4 = Most of the Time
5 = Always

1. It's easy for me to make new friends at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

2. I have nobody to talk to at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

3. I'm good at working with other kids at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

4. It's hard for me to make friends at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

6. I feel alone at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

7. I can find a friend when I need one. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

8. It's hard to get kids in school to like me. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

9. I don't have anyone to play with at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

10. I get along with other kids at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

11. I feel left out of things at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

12. There are no kids at school that I can go to when I need help. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

13. I don't get along with other kids at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

14. I'm lonely at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

15. I am well liked by the kids at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

16. I don't have any friends at school. How often is this true about you? Would you say never, hardly ever, sometimes, most of the time, or always?

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Vita

Name	*Michelle Cusumano*
Baccalaureate Degree	*Bachelor of Arts, Fairfield University, Fairfield* *Major: Psychology*
Date Graduated	*May, 2015*