

Impact of Emergency Shelter Utilization and Kinship Involvement on Children's Behavioral Outcomes

Child Maltreatment
1-10
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Abstract

Youth in child welfare often experience emergency shelter care, a type of congregate setting, while a permanent placement is arranged. The present longitudinal study explored the impact of initial emergency shelter placement on long-term externalizing behavior (i.e., aggression, delinquency) and internalizing symptom (i.e., anxiety, depression) trajectories, and whether kinship involvement moderated the effect of shelter placement on behavioral outcomes. The sample consisted of 282 youths (55.3% male) with an average age of 9.90 years ($SD = 2.37$); 36.9% experienced an emergency shelter placement. Data were collected from the Illinois Department of Children and Family Services. Caseworkers completed the Child and Adolescent Needs and Strengths, which measured youths' behavioral outcomes. Results suggested that shelter care was not associated with externalizing behavior trajectories. However, shelter care was associated with internalizing symptoms among children with less kinship involvement. Results from this study suggest that best practices for shelter care should leverage kinship involvement.

Keywords

child welfare, child maltreatment, kinship involvement, child welfare services, HLM

Maltreatment and neglect put children at risk of emotional and behavioral problems (Norman et al., 2012). Entry into foster care further increases the risk of emotional and behavioral difficulties, in part due to placement instability and separation from social supports (Strijker, Knorth, & Knot-Dickscheit, 2008). In particular, placement into an emergency shelter upon entry into the child welfare system intuitively involves both placement insecurity, as emergency shelter care is meant to be temporary, and separation from community supports, such as kin and fictive kin (i.e., nonrelative) networks. The current study explores the impact of initial emergency shelter care placement on long-term externalizing behavior (i.e., aggression, delinquency) and internalizing symptom (i.e., anxiety, depressive symptoms) trajectories. In addition, this study examines a frequently unexplored aspect of children's ecologies—their kin and fictive kin networks. Of particular interest is the impact of initial emergency shelter care placement on children's emotional and behavioral outcomes, and whether kinship connections moderate any effect of shelter placements on these outcomes.

Emergency Shelter Care

Emergency shelter care has been defined in numerous ways; we use the terms emergency shelter care and shelter care to refer to emergency placements in congregate care settings while a

permanent placement is being arranged (Leon, Jhe Bai, Fuller, & Busching, 2016b). There are four reasons why the child welfare system arguably needs emergency shelter care as a transitional placement option. First, shelter placements provide caseworkers time to determine the best, long-term foster placement. Second, emergency shelter care offers an opportunity for assessment of children's needs upon entry into care (Johnson, 2003). Third, even in times of relative stability in the foster care census, shelter placements are often necessary because children can be taken into care at any time, and a more permanent placement may not be immediately available. Fourth, the child welfare system is subject to swift policy changes, sometimes in response to disturbing cases (Child Welfare League of America [CWLA], 2005; Meltzer, Joseph, & Shookhoff, 2012; Pecora et al., 2017). These policy shifts often increase the number of youth entering foster care and place pressure on the system to find appropriate placements (Johnson, 2003; Meltzer et al., 2012; Pecora et al., 2017), necessitating emergency shelter care.

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Despite the potential advantages, recent attention to shelter care utilization in the form of consent decree litigation has highlighted numerous examples of inappropriate shelter care practices. The CWLA and American Bar Association on Children and the Law analyzed all consent decrees related to child welfare from 1995 to 2005; six of the 35 decrees cited inappropriate emergency shelter care utilization (CWLA, 2005). Complaints cited overcrowding, abuse, and exposure to violence (*B. H. v. McDonald*, 1988; *Ward v. Kearney*, 2000); stays lasting greater than 6 months (*Brian A. v. Sundquist*, 2001); and dangerous, unsanitary conditions of emergency shelters (*Kenny A. v. Perdue*, 2002).

The empirical literature has paid little attention to the outcomes of emergency shelter care, and we are not aware of any research that has explored the impact of emergency care placements on children's long-term well-being. However, extant research has found a link between emergency shelter care placements and placement disruptions later in care (Connell et al., 2006; Wulczyn, Chen, & Hilsop, 2007). DeSena and colleagues (2005) provided the only direct comparison of emergency shelter with traditional foster care, although outcomes related to children's well-being were not included. Their study compared the outcomes of Connecticut children in the SAFE Homes shelter care program, and a similar sample of children in traditional foster care selected with propensity score analysis (DeSena et al., 2005). The SAFE Homes program was created based on best practices in child welfare (i.e., concurrent case planning, keeping children in their communities and schools, ensuring siblings remain together; DeSena et al., 2005). Despite being twice as expensive, children in the SAFE Homes program had more placements, spent more time in out-of-home care, and were more likely to be placed outside of their community than children in traditional foster care (DeSena et al., 2005). There was no difference between the groups in whether youths stayed with siblings during care, returned to towns of origin, or reexperienced abuse 1 year into care (DeSena et al., 2005). Further examination of emergency shelter practices and outcomes is warranted, especially given that shelter care is frequently utilized but infrequently researched.

Kinship Involvement

Children form attachments not only with parents but also with a range of significant figures throughout development (Ainsworth, 1989). Primary nonparental attachments come from children's kin and fictive kin networks (e.g., family friends, natural mentors; Sterrett, Jones, McKee, & Kincaid, 2011), and the availability of these networks promotes healthy development (Chu, Saucier, & Hafner, 2010). Such attachments confer benefits through caregiving, fostering emotional and social development, and providing support during crisis (Ainsworth, 1989). In nonfoster care samples, kinship involvement protects against externalizing behaviors and internalizing symptoms, as well as the effects of nuclear family distress on these outcomes (Antaramian, Huebner, Hills, & Valois, 2010; Taylor, 2010). While research in this area is limited for foster

care samples, some work suggests that kinship networks protect against the development of risk-taking behaviors (e.g., delinquency, suicidality; Blakely, Leon, Fuller, & Jhe Bai, 2016), externalizing behaviors (Jhe Bai, Leon, & Fuller, 2016), and internalizing symptoms by buffering the impact of family dysfunction (Jhe Bai et al., 2016).

Kinship involvement with children in congregate care. Given the lack of research on emergency shelters and children's well-being, we turn our attention to the congregate care literature. While shelter care may be considered a congregate placement, other forms of congregate care (i.e., residential treatment) are fundamentally different from emergency shelters. For example, stays in shelters are meant to be temporary prior to placement in a foster home or another congregate setting. Traditional congregate settings may serve as long-term placements. Still children in both situations are placed in out-of-home, group settings (rather than a family environment) without consistent, direct contact with social networks. As such, the social disruptions experienced by children in foster care may be most pronounced among those in congregate care (e.g., residential treatment, emergency shelters; Gorske, Srebalus, & Walls, 2003; Stott & Gustavsson, 2010).

A qualitative study revealed that youths in congregate care experienced a number of losses upon entering care, including losing contact with family and friends (Hyde & Kammerer, 2009). Youths often acted out as a result of the trauma and losses experienced, which led to additional placement changes, deprivation of social support, and the perpetuation of this harmful cycle (Hyde & Kammerer, 2009). Relatedly, adolescents transitioning out of congregate care without secure relationships with adults were more likely to experience poverty, homelessness, victimization, and academic and employment issues (Freundlich & Avery, 2006). Freundlich and Avery (2006) recommend that families be engaged and relationships developed when children enter care.

Child welfare stakeholders recognize the importance of kin involvement among youth in residential treatment and thus advocate for family-centered treatment (CWLA, 2004). Familial involvement among youth in residential treatment has been associated with positive emotional and behavioral outcomes (Gorske et al., 2003; Robst et al., 2013; Wells, Wyatt, & Hobfoll, 1991). Robst and colleagues (2013) found that among children receiving residential treatment care, the total number of extended family contacts, including phone contacts, was associated with improvements in externalizing behaviors and internalizing symptoms. Further, this effect was larger for children placed in a different county than their prior residence (Robst et al., 2013), suggesting that the potentially negative impact of social isolation associated with congregate care placements may be mitigated by family contact. The factors associated with the experience of harmful social isolation for youth in emergency shelter care may be different than those associated with residential treatment placement, but the impact on well-being may be similar. However, to date, there has been no research addressing the impact of kin and fictive kin

involvement on the well-being of children placed in an emergency shelter, which is the primary aim of this study.

Current Study

The literature reviewed suggests that emergency shelter care may be a necessary service in the foster care system, a conclusion supported by the CWLA (2004). However, despite evidence that emergency shelter care is susceptible to harmful practices, we are not aware of a single study that has examined its impact on longitudinal well-being outcomes. Nonetheless, research suggests that while placement in a congregate care setting may be necessary and contribute to positive outcomes for youth (Curtis, Alexander, & Lunghofer, 2001; CWLA, 2004), such a setting can also be associated with social disruptions and negative outcomes above and beyond the effects of maltreatment (Barth, 2002; Gorske et al., 2003; Stott & Gustavsson, 2010; Strijker et al., 2008).

The current study examines the effect of an initial placement in an emergency shelter on the trajectories of externalizing behaviors and internalizing symptoms of children entering foster care over 6 months. This study further explores the impact that kinship involvement may have in buffering any negative association between shelter care placements and well-being outcomes. Age, gender, and race/ethnicity were controlled for in the present study, given these factors are common covariates in child welfare studies (Greeson et al., 2011; Pecora, White, Jackson, & Wiggins, 2009). Importantly, maltreatment severity was included as a covariate, given that severity has been associated with children's well-being in the context of foster care (Norman et al., 2012). From a social-ecological perspective, community violence seems to have a negative impact on emotional and behavioral outcomes and therefore was also included as a covariate (Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009). Rates of community violence are particularly high in the location where this study took place—a large and urban environment—and have been shown to be related to behavioral outcomes over time (Brady, Gorman-Smith, Henry, & Tolan, 2008; Griffin, Martinovich, Gawron, & Lyons, 2009). In order to isolate the impact of emergency shelter placement on well-being, it was important to take community violence into account.

Method

Participants

Data for this study were collected as a part of the Recruitment and Kin Connections Project (RKCP). The RKCP was conducted in conjunction with the Illinois (IL) Department of Children and Family Services (DCFS) to expand upon traditional child welfare practices by identifying and engaging relatives, fictive kin, and community supports of youth who enter foster care. The participants were children and adolescents between the ages of 6 and 13 who entered the care of the DCFS in Cook and Will counties between October 1, 2011, and June 1, 2014.

Table 1. Descriptive Statistics for Variables Used in Analyses.

Variable	Shelter		Nonshelter			
	N	%	Mean (SD)	N	%	Mean (SD)
Demographics						
Age	104		10.18 (2.43)	178		9.74 (2.33)
Gender (male)	104	53.8		178	56.2	
African American	104	62.5		178	59.6	
Child maltreatment	104		3.93 (2.33)	178		3.68 (2.11)
Community violence	104		0.37 (0.60)	178		0.37 (0.66)
Kinship involvement	104		4.41 (4.72)*	178		9.88 (7.92)*
Internalizing (Time 1)	104		1.41 (1.60)	178		1.28 (1.41)
Externalizing (Time 1)	104		0.78 (1.22)*	178		0.29 (0.67)*
Shelter days	94		25.85 (34.45)	—	—	—

* $p < .001$ (t test).

Overall, participants included 282 youths with a mean age of 9.90 years ($SD = 2.37$) at entry into foster care. Males composed slightly more of the sample (55.3%) than females. The overall sample consisted of 60.5% African American, 17.4% multiracial, 14.6% Latino, and 7.5% Caucasian or Asian American youths. Table 1 presents means and frequencies for the shelter ($n = 104$) and nonshelter subsamples ($n = 178$).

Procedures

A list of eligible participants for the study was provided to research assistants at Loyola University Chicago by the DCFS. Research assistants searched the IL DCFS Statewide Automated Child Welfare Information System (SACWIS) database to gather demographic and kin information. This information was obtained primarily from the participant's Integrated Assessment (IA). As required by the state of IL, the IA is completed within 45 days of youth entering DCFS care through temporary custody. IA screeners are licensed mental health professionals who conduct in-person interviews with each youth and her or his parent(s) and foster parent(s) to examine the medical, social, developmental, psychological, familial, and educational domains of both the child and the adults involved in the case. The main objective of the IA is to make appropriate placement decisions and to develop a service plan that meets the needs of families. The IA also provides information on the involvement of children's kin and fictive kin networks (see below). Phone interviews were conducted with caseworkers to confirm that kin involvement throughout the children's time in care was properly recorded. The Child and Adolescent Needs and Strengths (CANS; Lyons, 2009) was completed as part of the IA and then quarterly throughout children's time in care. Participants were included in the present study if they had three or more CANS assessments. Some exited the system prior to completion of three or more CANS assessments and therefore were not included in analyses. Differences were examined between children with and without three or more CANS assessments and are described further in Statistical Analyses section.

Measures

Demographic and kin information. Research assistants used the file reviews of the IAs on the SACWIS and caseworker phone interviews to complete the Kin Identification and Level of Engagement (KILE) form, a tool developed by the larger RKCP. The KILE form included information on children's race/ethnicity, gender, age, history of abuse or neglect, placement history, length of stay in shelter, and kin (e.g., maternal grandmother, paternal aunt) and fictive kin (e.g., close family friend, godparent) networks. Moreover, this form was used to document the type of involvement of identified kin and fictive kin. The categories of kinship involvement included visitation, phone calls, homework help, mentoring, transportation assistance, coaching, sending birthday cards or letters, invitations to family events, attendance at important events, serving as a placement option, and providing respite/support to biological parents and foster parents. Each type of involvement was given a value of 1; a composite score was created that included both kin and fictive kin involvement, representing the sum of all categories of involvement (e.g., visits, phone calls) across individuals (e.g., grandparents, godparents). Research assistants completed the KILE form approximately 90 days after children's entry into care. While the KILE form was completed after most children exited emergency shelter care, information obtained from the caseworker phone calls was retrospective and based on types of kin involvement since children's entry into foster care, including their time in shelter care.

Research assistants initially corated cases to ensure reliability and then independently completed the KILE form for each case. Still research assistants discussed ratings on an ongoing basis to ensure consensus and consistency. The KILE form has demonstrated concurrent and predictive validity, as studies have found total family involvement measured by the form predicted shelter versus kinship foster placements above clinical and demographic variables measured at baseline (Leon et al., 2016b), moderated the association between family dysfunction and CANS externalizing behaviors (Jhe Bai et al., 2016), and predicted lower risk behavior trajectories throughout children's time in care (Blakely et al., 2017).

CANS. Child maltreatment severity, community violence, and youths' outcomes (i.e., externalizing behaviors, internalizing symptoms) were evaluated using the CANS (Lyons, 2009). The CANS is completed as part of the IA by an IL DCFS staff member who establishes 85% rating accuracy prior to entering the field. The CANS is subsequently completed quarterly throughout children's time in care. This structured instrument assesses the needs and strengths of youth and caregivers across multiple domains. The CANS guides treatment for youth and assists with case planning (e.g., placement decision-making; Lyons, 2009).

The CANS consists of 105 questions and assesses seven areas of children's functioning: trauma experience, traumatic stress symptoms, youth strengths, life domain functioning, acculturation, youth behavioral/emotional needs, and youth

risk behaviors (Lyons, 2017). For each item on the CANS, severity ratings are reported on a 4-point Likert-type scale of 0–3, where a score of 0 indicates *no evidence of needs*, 1 indicates *a need for monitoring or preventive services*, 2 indicates *a need for addressing the issue*, and 3 indicates *a need for immediate/intensive action* (Lyons, 2017). For CANS items assessing a child's strengths, this coding is reversed, where a score of 0 indicates *a key strength*, a score of 1 indicates *a strength that can be used in planning*, a 2 indicates *a strength that needs to be developed*, and a score of 3 indicates *no identified strength* (Lyons, 2009, 2017). The CANS manual provides detailed descriptions of each numerical rating for the specific dimension items (Lyons, 2017).

Through a principal components analysis, items from the CANS were selected to represent child maltreatment, externalizing behaviors, and internalizing symptoms (Jhe Bai et al., 2016; Leon, Jhe Bai, & Fuller, 2016a; Leon et al., 2016b). The listwise deletion technique was used to address missing data as opposed to other estimation techniques, as the data were too significant to estimate (i.e., CANS Time 1, later CANS time points). The following items were selected to represent child maltreatment: sexual abuse, physical abuse, emotional abuse, and neglect. The following two scales were also developed: externalizing behaviors (i.e., oppositional behavior, conduct, attention deficit/impulse control, anger control, danger to others, sexual aggression, and delinquency) and internalizing symptoms (i.e., depression, anxiety, somatization, traumatic grief/separation, and adjustment to trauma). Cronbach's α coefficients for all scales have been shown to be above .70 (Jhe Bai et al., 2016; Leon et al., 2016a; Leon et al., 2016b), meeting Nunnally's (1978) criterion for acceptable internal consistency. The CANS internalizing and externalizing scales have been used in both cross-sectional and longitudinal studies in the past and demonstrated concurrent validity. Studies revealed that family dysfunction and child maltreatment each related to internalizing symptoms and externalizing behaviors following entry into foster care (Jhe Bai et al., 2016) and that father involvement among youths in foster care was associated with fewer externalizing behaviors over time (Leon et al., 2016a).

Statistical Analyses

Multilevel modeling was conducted via hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992). Through applying a three-level multilevel model to the data, each child's internalizing problem or externalizing behavior intensity was first modeled as a function of quarter since entering care (Level 1). Two parameters were estimated, the intercept and the slope; the slope was the parameter of interest in the current study. At Level 2 (child level), child characteristics at Time 1 were used to predict the Level 1 slope parameter. At Level 3, children were nested within family; however, family characteristics were not used to model slopes (number of types of kin involvement was measured at the child level). Of primary interest, Level 2 Time 1 (i.e., time invariant) predictors (e.g., placement) were used to predict externalizing behavior and

Table 2. Correlation Matrix Among Study Variables.

Study Variables	1	2	3	4	5	6	7	8	9
1. Age	—								
2. Race (African American)	.11	—							
3. Gender (female)	.10	-.02	—						
4. Community violence	.09	.26**	-.01	—					
5. Maltreatment	.06	.02	-.01	.27**	—				
6. Kinship involvement	-.17**	-.06	-.10	-.07	-.03	—			
7. Shelter	.09	.03	-.02	-.00	.06	-.36**	—		
8. Internalizing (Time 1)	.04	.17**	-.04	.22**	.29**	-.13*	.04	—	
9. Externalizing (Time 1)	.20**	.10	-.12*	.23**	.18**	-.16**	.25**	.18**	—

* $p < .05$. ** $p < .01$.

internalizing symptom slope trajectories. While HLM is different from more traditional regression tools, such as ordinary least squares regression, generally the statistics (e.g., β weights) and interpretations (positive or negative values symbolizing relationships with dependent variables) are similar. Time was measured in 3-month intervals, given that CANS assessments are required to be conducted quarterly. However, given the naturalistic study setting, CANS assessments were often not completed on a standard quarterly basis. Further, youths with longer stays in IL's foster care system had more CANS assessments. Fortunately, as long as the time variable is measured and modeled, HLM can manage such unbalanced data.

At least three data points are necessary to run a hierarchical generalized linear model (HGLM) analysis. In the total sample of 413 youths, only 291 (70.50%) had three or more assessments and 282, the total participants in the present study, were not missing any data required for analyses. Children who were first placed in the shelter were more likely to have three or more assessments than children first placed outside of the shelter, 77.5% versus 66.4%, respectively, $\chi^2(1, N = 413) = 5.64$, $p = .018$, which is likely due to the fact that children in shelter care had been in care longer upon study completion, shelter group days in care: $M = 731.04$, $SD = 367.85$; nonshelter group days in care: $M = 538.92$, $SD = 331.43$, $F(1, 413) = 29.68$, $p = .001$. Nonetheless, there were no statistically significant differences between children with three or more versus less than three data points in terms of age, gender, race/ethnicity, reason for entry into care, severity of maltreatment, number of types of kin involvement, Time 1 internalizing problems or externalizing behaviors, or severity of community violence.

The outcomes, externalizing behaviors and internalizing symptoms, were positively skewed with a large number of zeros. The use of data transformations (i.e., log transformation) are inadequate in meeting test assumptions, especially the assumption of normality of residuals. This results in biased parameter estimates and a greater likelihood of Type I errors. Therefore, CANS items were recoded into dichotomous count data; 0 or a 1 were recoded into 0 (*absence of a problem*) and 2 or 3 into a 1 (*presence of a problem*). In practice, caseworkers are only required to address a problem if a CANS item is rated as 2 or

a 3. The items were summed, allowing us to use HLM to run a HGLM with a Poisson distributed outcome consisting of count data. Since the mean and standard deviation of the externalizing behavior and internalizing symptom scales were equivalent, we ran the model using the overdispersion feature. Due to the number of variables in the study, a p value of .01 was used.

Results

Descriptives

There were no significant differences in demographics (i.e., age, gender, and race) between youths in shelter versus nonshelter care. The mean severity of maltreatment and community violence was also comparable (see Table 1). However, there was a significant difference in mean number of types of kin involvement, $t(279.88) = 7.26$, $p < .001$; Levene's test suggested unequal variances ($F = 30.57$, $p < .001$), thus degrees of freedom were adjusted from 280 to 279.88. Youths in nonshelter placement ($M = 9.88$, $SD = 7.92$) had a higher number of kinship involvement types compared to youths in shelters ($M = 4.41$, $SD = 4.72$). The means of internalizing symptoms at Time 1 were comparable between shelter and nonshelter groups, but youths who experienced shelter placement exhibited significantly more externalizing behaviors at Time 1 ($M = 0.78$, $SD = 1.22$) than youths without a shelter placement ($M = 0.29$, $SD = 0.67$), $t(139.52) = 3.75$, $p < .001$. Levene's test suggested unequal variances ($F = 40.96$, $p < .001$); therefore, degrees of freedom were adjusted from 280 to 139.52. The average length of time youths spent in shelter care was 25.85 days ($SD = 34.45$). See Table 2 for correlation coefficients.

HGLM Results

Externalizing behaviors. All slopes and intercepts in the unconditional model for both internalizing symptoms and externalizing behaviors were significant. In terms of slope effects, the primary interest of our study, only Time 1 externalizing behaviors were significant of the 10 slope variables modeled and were negatively associated with the slope of externalizing behaviors over time ($\beta_{12} = -.030$, $p < .001$). Two variables approached significance—the slope intercept ($\beta_{10} = .076$, $p = .014$) and the community violence CANS item ($\beta_{17} = -.031$, $p = .016$).

Table 3. Multilevel Poisson Model (Population Average) for CANS Externalizing Behavior and Internalizing Symptoms Trajectories.

Fixed Effects	Externalizing Behaviors			Internalizing Symptoms		
	Coefficient	SE	<i>p</i>	Coefficient	SE	<i>p</i>
Slope terms						
Intercept β_{10}	.076	.030	.014	-.045	.029	.124
Gender β_{11}	-.012	.023	.587	.008	.020	.707
CANS Time 1 (externalizing/Internalizing) β_{12}	-.030	.008	<.001	-.034	.007	<.001
Shelter β_{13}	-.020	.030	.502	.045	.025	.077
Kinship involvement β_{14}	-.001	.014	.959	-.001	.016	.976
Age β_{15}	.004	.014	.767	-.015	.010	.156
Race/ethnicity (African American) β_{16}	-.011	.024	.653	-.008	.026	.740
Community violence β_{17}	-.031	.013	.016	-.013	.017	.424
Maltreatment β_{18}	.007	.004	.076	.007	.005	.135
Shelter \times Kinship Involvement β_{19}	-.038	.032	.229	-.085	.025	.001

Note. CANS = Child and Adolescent Needs and Strengths.

However, we chose a more conservative α of .01. Results indicated that shelter placement did not predict long-term externalizing behavior trajectories, and the shelter placement by kinship involvement interaction was also not significant (see Table 3).

Internalizing symptoms. Time 1 internalizing symptoms were negatively associated with the slope of internalizing symptoms over time ($\beta_{12} = -.034, p < .001$), but no other main effects were statistically significant. There was a significant interaction between number of kinship involvement types and shelter placement ($\beta_{19} = -.085, p = .001$), controlling for demographic and socioecological variables. We probed the interaction between number of kin involvement types and shelter placement using recommendations from Preacher, Curran, and Bauer (2006) for calculating simple slopes from interactions obtained from HGLM. A simple slopes analysis revealed that the slope of the association between kinship involvement and internalizing symptoms for youths who had been in shelter care was significant ($\beta = -.079, p < .001$), suggesting that higher kinship involvement types across kin predicted fewer internalizing symptoms over time among youths initially in shelters. On the other hand, the slope of kinship involvement for youths in nonshelter placement was not significant ($\beta = .003, p = .952$), indicating that number of kin involvement types was not significantly related to internalizing symptoms among youths in nonshelter care. See Figure 1 for a graph of the probed interaction.

Given that shelter care was associated with negative internalizing symptom trajectories for a subset of the sample, we next examined whether length of stay in the shelter for those with a shelter placement was associated with internalizing symptom slopes and whether number of kinship involvement types might moderate this association. Time 1 internalizing symptoms were negatively associated with the slope of internalizing symptoms over time ($\beta_{12} = -.035, p < .001$). Two additional variables were significantly associated with changes in internalizing symptom trajectories: race/ethnicity ($\beta_{16} =$

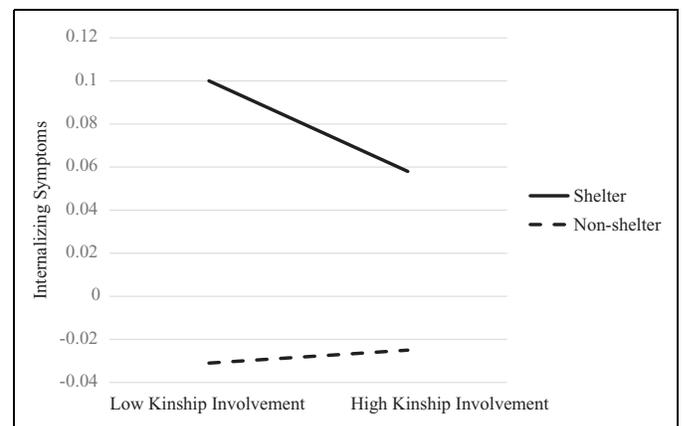


Figure 1. Reported internalizing symptoms as a function of kinship involvement and shelter placement.

$-.107, p = .005$), with African American youths exhibiting fewer internalizing symptoms over time, and kinship involvement ($\beta_{14} = -.073, p = .003$), with higher number of kinship involvement types associated with fewer long-term internalizing symptoms (consistent with the previous results with the entire sample). Of note, length of stay in the shelter (“shelter days”) was not associated as a main effect with internalizing outcomes and there was no interaction between the length of stay in the shelter and kinship involvement types (see Table 4).

It may have been the case that children in the shelter with fewer kinship involvement types across kin were less likely to experience a second placement in a kinship foster home and may have been more likely to experience a less advantageous second placement (e.g., group home). If so, then it is possible that the second placement, rather than the shelter placement, was having the effect on outcomes. Therefore, we examined differences in number of kinship involvement types among children with a first placement in a shelter in terms of their second placement after the shelter (i.e., kinship foster, traditional foster, specialized foster, return home, congregate care). An analysis of covariance, controlling for Time 1 externalizing

Table 4. Multilevel Poisson Model (Population Average) for CANS Internalizing Symptoms Trajectories Among Youth With Shelter Placement (Shelter Days \times Kinship Involvement).

Fixed Effects	Coefficient	SE	<i>p</i>
Slope terms			
Intercept β 10	.003	.044	.952
Gender β 11	-.022	.027	.404
CANS Time 1 internalizing symptoms β 12	-.035	.008	<.001
Kinship involvement β 13	-.073	.023	.003
Age β 14	.004	.015	.799
Shelter days β 15	.007	.016	.642
Race/ethnicity (African American) β 16	-.107	.037	.005
Community violence β 17	.006	.022	.774
Maltreatment β 18	.017	.007	.015
Shelter \times Kinship Involvement β 09	-.023	.025	.366

Note. CANS = Child and Adolescent Needs and Strengths.

behaviors, Time 1 internalizing symptoms, age, and gender, revealed no significant differences in overall kin involvement across children in these second, postshelter placements, $F(7, 43) = .1.69, p = .22$.

Discussion

Emergency shelters are widely used within the child welfare system (CWLA, 2005) yet are underresearched. While research on emergency shelters is scant, we know that youth entering these facilities are from underserved groups who have faced adversity (i.e., juvenile detention, mental health concerns; Leon et al., 2016b; Litrownik, Taussig, Landsverk, & Garland, 1999; Ryan, Marshall, Herz, & Hernandez, 2008). Recent consent decree litigation and evidence from the broader congregate care literature suggest that children may be adversely affected by an emergency shelter placement upon entry into foster care. The negative effects of a shelter placement may be due in part to the social isolation that occurs when placed in the shelter. Therefore, an involved family system may protect against negative shelter care outcomes. This study sought to fill a gap in the literature by examining the impact of an emergency shelter care placement on emotional and behavioral outcomes, and the possible moderating effect of number of kin involvement types on these outcomes among youths in foster care.

Preliminary analyses revealed that children who were placed in emergency shelter care had significantly fewer types of involvement across kin and more externalizing behaviors than those in other foster care placements. This finding was expected, given that children may be less likely to be in the shelter if they have more family available to serve as caregivers or as supports for caregivers. Youth also may be less likely to be in the shelter if they have fewer behavioral challenges. In terms of longitudinal well-being outcomes, we found that placement in the shelter was not associated with internalizing symptom or externalizing behavior trajectories. However, a significant shelter by kinship involvement interaction indicated

that shelter care was associated with higher internalizing symptoms among children with fewer kin involvement types.

Put another way, a shelter care placement appears to be a risk factor for behavioral maladjustment, but number of kin involvement types may buffer this effect in what Cohen and Wills (1985) described as the stress buffering hypothesis. Cohen and Wills (1985) suggest that social support can buffer against the effect of stress on an outcome in a number of ways. For example, support from social networks can protect self-esteem in the face of stress, and informational support can help people modulate their negative appraisals related to stress (Cohen & Wills, 1985). The role of social networks in promoting positive outcomes (i.e., maintaining positive relationships with family, reductions in behavioral problems) among youth who have been placed in congregate settings has received recent attention (e.g., Boel-Studt & Landsman, 2016; Huefner, Pick, Smith, Stevens, & Mason, 2015) and is worthy of more study. In the broader child welfare literature, prior research has found that social support buffers against the negative impact of maltreatment on internalizing symptoms among children in foster care (Salazar, Keller, & Courtney, 2011). In a cross-sectional study using a portion of the sample of youths in foster care from the current study, Jhe Bai and colleagues (2016) found that kin and fictive kin involvement (e.g., visits, phone calls, tutoring) was associated with fewer internalizing problems at lower levels of nuclear family dysfunction.

Interestingly, in a subsequent analysis among the children with a shelter placement, the number of days spent in the shelter was not associated with negative outcomes. This suggests that the negative impact of a shelter placement may not be dose-dependent. Rather, it may be that the placement itself, regardless of amount of time in the shelter, negatively impacts children. Alternatively, child characteristics that were not measured in the present study may impact youths' outcomes when placed in shelters. Still placement in the shelter may create an appraisal among youth that they are not wanted or loved, leading to a sense of rejection and isolation (Charles & Nelson, 2000). Qualitative research on children in residential treatment indicated that they responded with appraisals that they were a burden to foster parents (Hyde & Kammerer, 2009). In addition, youths experienced anxiety about the placement due to a sense that the milieu appeared "chaotic" (Hyde & Kammerer, 2009).

Previous research suggests children placed in a shelter do not have increased emotional and behavioral difficulties compared to children initially placed in a foster home (Leon et al., 2016b). In the current study, youths who had been in a shelter placement did not exhibit worse internalizing symptoms at baseline. Shelter placement was associated with internalizing symptoms over time among children with fewer kinship involvement types. Perhaps family involvement buffers the experience of social rejection and negative emotions related to the anxiety of being placed in a large, new, and possibly chaotic milieu, which would support Cohen and Wills's (1985) claim

that social support can be protective in the form of emotional and informational support.

While research indicates that traditional foster care and stable placements are more desirable and efficient than institutional care (Barth, 2002, 2005; Dozier, Zeanah, Wallin, & Shaffer, 2012), there are a number of reasons children may require placement in emergency shelter (e.g., time for assessment, influxes of youth entering care; CWLA, 2004; Johnson, 2003). Thus, the CWLA (2004) supports the use of shelter care. Therefore, while there seems to be a need for shelter care, future research, policies, and programs should explore ways to improve current practices to promote the involvement of kin among children with an emergency shelter care placement. For example, kinship involvement has been leveraged successfully in residential treatment and other congregate care settings (Gorske et al., 2003; Robst et al., 2013; Stott & Gustavsson, 2010; Wells et al., 1991). Congregate placements have attempted more family-centered group settings and/or wrap-around services until other community supports are available (Barth, 2002; Pecora et al., 2017; Whittaker et al., 2016). While the inclusion of family in other congregate settings (i.e., residential treatment) consists of involvement in the treatment and long-term planning, shelter agencies may still pull from congregate care models to utilize the protective effects of kinship involvement. For example, family involvement in shelter care could take the form of providing familiar social connection and consistency in the child's life during a tumultuous transition through phone calls and visits. Caseworkers could place more emphasis on contacting and connecting kin with youth, especially if they are placed in an emergency shelter. Caseworkers could alert kin, when children are moved to different placements to ensure that they can remain involved.

In addition to practice implications, a number of limitations of the present study must be considered. First, the average length of stay in shelter care ($M = 25.85$, $SD = 34.45$ days) was shorter than the 45-day period in which the IA, and therefore the CANS, had to be completed. The CANS may have been completed after children left the shelter, which may have influenced the internalizing symptoms and externalizing behaviors detected. Second, while the data provide information about the number of kin involved with children and the nature of involvement (i.e., phone calls, visits, letters), we were unable to specifically determine the quantity or quality of contact. Further, our measurement of kinship involvement relied on verification with IA caseworkers and their subjective understanding of the youths' kin involvement throughout their time in care, including during the shelter placement. Third, our measure of kin and fictive kin involvement did not measure social support as it has been defined in the literature. Part of the reason for this is that our tool attempts to measure "actual support" across kin in the form of tangible involvement behaviors, such as visits, childcare, and transportation. Traditional measures include emotional, informational, and appraisal support, rated from participants' perspectives. Therefore, this study should be seen as an examination of kin and fictive kin network involvement and not social support, as it has been

defined in the literature. Finally, the generalizability may be limited, given that this study took place in an urban, Midwestern city.

Future research should explore the effects of shelter care on children's well-being in other states with differing policies. In addition, safety and permanency factors that influence child welfare decision-making and whether children are placed in shelters must be examined. These factors may influence internalizing symptoms and externalizing behaviors and were not examined in the present study. Research should explore whether shelter care impacts the quality and stability of subsequent placements in foster care. Perhaps a child who experiences shelter care is more likely to be placed with underresourced foster homes compared to those able to take the child immediately. On the other hand, children in shelters may have better future placements, given that caseworkers have time to assess the situation and find appropriate placements.

This is the first study to examine the behavioral outcomes among children in shelter care. Future research should examine the mechanisms by which children in shelters develop internalizing symptoms, and how kin involvement improves children's outcomes. Broadly, more research should focus on shelter care, including child characteristics at entry into shelter care, experiences of children while in shelters, and long-term effects of shelter care. Such research is essential to inform child welfare policies and practice. Some best practices of shelter care have been identified (Liese, Anderson, & Evans, 2004; Shealy, 1995; Terpstra, 2003) but should be enhanced based on empirical examination of children's well-being in the context of shelter care. In particular, the present study suggests that leveraging kinship involvement would be particularly important in supporting children in shelter care settings.

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