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Psychosocial Consequences of Caregiver Transitions for Maltreated Youth Entering Foster Care: The Moderating Impact of Community Violence Exposure

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Abstract

Youth who experience a greater number of caregiver transitions during childhood are at risk for developing a host of psychosocial problems. Although researchers have examined individual-level factors that may moderate this association, no known studies have examined the impact of community-level factors. The current study investigated whether community violence exposure moderated the association between number of prior caregiver transitions and increases in levels of externalizing and internalizing problems for a sample of youth entering foster care. Participants included 156 youth (age 9 to 11 at first assessment) removed from their homes because of maltreatment. Youth provided reports of caregiver transitions and community violence exposure at baseline, and caregivers, teachers, and youth reported on externalizing and internalizing problems 18–22 months later. Results from hierarchical multiple regression analyses indicated that youth with a greater number of caregiver transitions and higher levels of community violence exposure evidenced significant increases in levels of psychosocial problems. The results of the study are discussed in terms of their implications for child welfare services.

Keywords

adolescents; caregiver transitions; community violence; foster care; psychosocial problems

According to a recent report from the U. S. Department of Health and Human Services (DHHS, 2009a), an estimated 794,000 children were victims of substantiated maltreatment in 2007. Of these children, approximately 293,000 experienced a level of maltreatment deemed significant enough to require placement in foster care (DHHS, 2009b), which includes kinship care (e.g., placement with relatives) and institutional care (e.g., group homes). Although the deleterious psychosocial consequences associated with child maltreatment are well documented (see Newton, Litrownik, & Landsverk, 2000, for a review), relatively fewer studies have evaluated the impact of prior caregiver transitions for maltreated youth entering foster care.

Youth who have been abused or neglected experience a greater number of caregiver transitions during childhood and adolescence compared to nonmaltreated youth (Herrenkohl, Herrenkohl, & Egolf, 2003). These transitions can occur for a variety of reasons. Parents who are facing economic difficulties, for example, may place their children with relatives or friends. In other instances, a parent may be forced to leave the home to serve a prison sentence. Regardless of the reason for the caregiver instability, when youth experience a

greater number of caregiver transitions, they are at an increased risk of developing behavioral and psychosocial problems. Caregiver instability has been linked with higher levels of delinquency (Herrenkohl et al., 2003; Thornberry, Smith, Rivera, Huizinga, & Stouthamer-Loeber, 1999), antisocial behavior (Keller, Catalano, Haggerty, & Flemming, 2002), and internalizing problems (Cicchetti & Tucker, 1994). Furthermore, youth who enter foster care with elevated levels of psychosocial problems are at an increased risk of experiencing placement disruptions (Newton et al., 2000). In prospective studies, placement disruptions preceded increases in further psychosocial problems, and this impact was evident even after controlling for preexisting emotional and behavioral issues (Newton et al., 2000; Ryan & Testa, 2005).

The link between caregiver transitions and adverse psychosocial outcomes appears robust, and researchers have begun to examine individual characteristics (e.g., gender, ethnicity, age) that may moderate this relationship (Keller et al., 2002). There are, however, no known studies that have explored the impact of community-level factors in moderating the longitudinal impact of caregiver transitions. Cicchetti and colleagues (Cicchetti & Lynch, 1993; Lynch & Cicchetti, 1998) have theorized that the psychosocial development of maltreated children is dependent on the interaction of characteristics of the family or home environment with qualities of the neighborhood and community in which the family resides. Furthermore, each of these levels of a child's environment may contain risk factors that increase the likelihood of poor developmental outcomes, with community-level risks expected to moderate the impact of family-level factors (Lynch & Cicchetti, 1998). Although caregiver transitions are a family-level risk factor that increases the likelihood that maltreated youth will experience psychosocial problems, it is unknown whether community-level risk factors compound this impact.

Community Violence Exposure

One community-level risk factor that has received considerable attention from researchers is community violence exposure (CVE). CVE in childhood is a pervasive problem, particularly for youth from urban settings, as recent studies find that between 75% and 90% of urban adolescents have witnessed at least one act of violence in their neighborhoods (Malik, 2008; McCabe, Lucchini, Hough, Yeh, & Hazen, 2005). There is also evidence that a high percentage of maltreated youth entering foster care are exposed to violence in their communities (Garrido, Taussig, Culhane, & Raviv, in press). Stein and colleagues found that 87% of youth placed in foster care reported witnessing or being a victim of community violence in their lifetime, with almost half exposed to violence in the past 6 months (Stein et al., 2001).

CVE has been prospectively linked to a variety of internalizing (see Wilson & Rosenthal, 2003, for a review) and externalizing (Brady, Gorman-Smith, Henry, & Tolan, 2008) problems. Moreover, researchers investigating the negative impact of CVE have found that caregiver and family support play a role in moderating the negative effects of CVE. Youth who report lower levels of caregiver and family support while also being exposed to high levels of community violence evidence greater symptoms of depression (Overstreet, Dempsey, Graham, & Moeley, 1999), posttraumatic stress disorder (Kliewer, Lepore, Oskin, & Johnson, 1998), and externalizing problems (Plybon & Kliewer, 2001) than youth with higher levels of caregiver and family support.

Not surprisingly, youth who experience an increased number of caregiver transitions report feeling more distant and less close to caregivers (Thomson, Mosley, Hanson, & McLanahan, 2001) and feel less supported (Peterson & Zill, 1986). Given the importance of caregiver and family support in moderating the negative impact of CVE, it is expected that youth

entering foster care who have experienced a greater number of caregiver transitions, coupled with high levels of CVE, will evidence the greatest increase in psychosocial problems over time.

The Current Study

Thus, the objective of the current study was to examine the longitudinal impact of caregiver transitions and CVE on psychosocial problems for a sample of youth who had been placed recently in foster care because of maltreatment. We examined the association between caregiver transitions and CVE in predicting externalizing and internalizing problems. Psychosocial problems were assessed 18–22 months after the baseline assessment using caregiver, teacher, and youth reports. Based on the results of previous studies, we expected a greater number of caregiver transitions and greater levels of CVE would independently predict increases in psychosocial problems. However, we also expected that these main effects would be qualified by a two-way interaction. More specifically, we hypothesized that youth with a greater number of caregiver transitions and high levels of CVE would evidence the greatest increases in psychosocial problems.

Method

Procedure

All procedures and measures were approved by the University's institutional review board and were conducted after obtaining youth assent and caregiver consent. The baseline assessment of youth and their caregivers was conducted across five cohorts over five consecutive summers (June–August) between 2002 and 2006. The time 2 (T2) interview was conducted approximately 18 months later, during each winter (December–January) between 2003 and 2007. At both assessments, youth and their caregivers were interviewed separately at the child's current residence (e.g., foster home, kinship home, residential treatment facility) or other community location. All measures were administered verbally by the interviewer. This technique helped to ensure that participants were engaged in the assessment process and understood the questions. Youth and their caregivers were paid \$40 for their participation at each time point. Teachers completed surveys only at 22 months postbaseline during the spring of the academic year. Surveys were mailed to teachers, who completed the study measures at their convenience. Teachers were paid \$25 for completing the T2 survey.

Participants

Recruitment—Participants in the current study included youth, their foster parents, and their teachers. All eligible youth in participating counties were recruited for the study if they met the following inclusion criteria: a) they had been court-ordered into foster care within the preceding 12 months due to abuse or neglect, b) they had lived with their current caregiver for at least 3 weeks, c) they were proficient in English, and d) they were not cognitively impaired (i.e., full scale IQ < 70). When multiple members of a sibling group were eligible, one sibling was randomly selected to be included in the current study. Ninety percent of eligible youth and caregivers agreed to take part in the baseline interview. Of the 172 participants completing a baseline interview, 9.4% ($n = 16$) were lost to follow up at T2. Results of t-tests and chi-square analyses indicated that participants who were lost to follow up did not differ from study participants on baseline characteristics, including age, race/ethnicity, number of caregiver transitions, and exposure to community violence.

Subsequent to the baseline interview, a subset of youth in the current study completed a 9-month intervention program (see Taussig, Culhane, & Hettleman, 2007, for details).

Although the current study was not a test of the impact of the intervention, we did conduct preliminary analyses to determine whether intervention status was associated with any of the predictor or outcome variables. We categorized participants into three groups: a) those who were assigned to the treatment condition, b) those who were assigned to the control condition, and c) those who were not assigned to either the treatment or control condition. After dummy coding these three categories into two variables, we used regression analyses to test for group differences on the predictor and outcome variables. Results of these analyses indicated that there were no group differences on CVE, number of caregiver transitions, or the outcome variables. In addition, group status did not moderate the association between caregiver transitions and the outcome variables or the association between CVE and the outcome variables; thus, we did not include intervention status in subsequent analyses.

Participant characteristics—The final sample of 156 youth was 50.6% ($n = 79$) female, with a mean age at the baseline interview of 10.44 years ($SD = .89$). The sample was racially and ethnically diverse. Forty-six percent of youth were Hispanic, 48.7% Caucasian, 29.5% African American, 7.1% Native American, and 3.2% Asian or Pacific Islander (nonexclusive categories). Youth at the baseline interview were living in nonkinship foster care (49.4%), kinship foster care (42.9%), or institutional care (7.7%).

Measures of Independent/Moderator Variables

Caregiver transitions—At the baseline interview, youth were asked, “How many caregiver transitions have you experienced in your life?” Interviewers worked with youth to complete a chronological log of the caregivers they had lived with, which helped to validate the single-item count variable. When youth lived with the same caregiver for noncontiguous periods of time, each occasion was included in the summed number of caregiver transitions, which formed the caregiver transitions composite.

CVE—An adapted, 12-item version of the Things I Have Seen and Heard scale (Richters & Martinez, 1993) was administered to youth at the baseline interview as a measure of CVE. Youth were asked to indicate the number of times in the past year they had seen or heard acts such as, “guns being shot,” or “somebody stealing something from a store or another person’s house.” Item responses were provided on a 5-point scale ranging from 0 (*never*) to 4 (*four or more times*) and were summed to form a CVE composite score.

Measures of Dependent Variables

Caregiver reports of psychosocial problems—At both the baseline and T2 interviews, caregivers completed the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001). The CBCL is a widely used standardized measure of child behavior problems with sound psychometric properties. Externalizing problems were measured with the 35-item Externalizing Problems scale of the CBCL, which is comprised of the Rule-Breaking and Aggressive Behavior subscales. Caregivers also completed the 32-item Internalizing Problems scale of the CBCL (Achenbach & Rescorla, 2001). Three subscales, Anxiety/Depression, Withdrawn/Depression, and Somatic Complaints, collectively form the Internalizing Problems scale. Caregivers were asked to indicate how true each item was for their child “now or within the past 6 months,” with response options ranging from 0 (*not true*) to 2 (*very true or often true*). Following Achenbach’s recommendations (Achenbach & Rescorla, 2001), CBCL raw scores were used in all analyses. Higher scores on the Externalizing and Internalizing Problems scales were indicative of greater levels of problems.

Teacher reports of psychosocial problems—At T2, teachers completed the Teacher Report Form (TRF) of the CBCL (Achenbach & Rescorla, 2001). The TRF uses the same scales and response options as those in the CBCL; however, teachers were asked to indicate how true the items were of the target child during the previous two months. TRF raw scores on the Externalizing and Internalizing Problems scales were used in all analyses.

Posttraumatic stress symptoms (PTSS)—As a measure of PTSS, youth were administered the Trauma Symptom Checklist for Children (TSCC; Briere, 1996) at baseline and at T2. The TSCC is a 54-item self-report measure of trauma-based symptoms and is comprised of six clinical subscales: dissociation, PTSS, anxiety, depression, anger, and sexual concerns. In the current study we examined participants' scores on the 10-item PTSS symptoms scale only. For each item, participants were asked to indicate "how often each thing happens to you," with responses scored on a 4-point scale ranging from 0 (*never*) to 3 (*almost all of the time*). Participants' standardized scores on the PTSS scale were used in analyses.

Measures of Control Variables

Maltreatment severity—Child Protection Services' (CPS) intake reports and Dependency and Neglect petitions (i.e., narratives of the history and events precipitating the legal filings) were used to code the type and severity of maltreatment that led to the child's removal from the home. Using the maltreatment classification system developed by Barnett, Manly, and Cicchetti (1993), two to three trained research assistants coded the severity associated with each type of maltreatment described in the intake report and/or petition. Research assistants resolved discrepancies by consensus, and when there was any difficulty, one of the project's senior investigators resolved the discrepancy in coders' ratings. Possible maltreatment types coded for included: physical abuse, sexual abuse, emotional abuse, failure to provide, moral/legal abuse, educational neglect, and lack of supervision. Maltreatment severity codes ranged from 1 to 5, with 1 indicating *minor abuse or neglect* and 5 indicating *serious incidents of abuse or neglect*. In the current study, we used the participants' highest severity rating across the different types of abuse/neglect as a measure of maltreatment severity.

Youth characteristics—Youth self-reported their sex (1 = *male*; 0 = *female*), age, and race/ethnicity. Race/ethnicity was dichotomized as Caucasian (1 = *yes*) and non-Caucasian (0 = *no*). Youth who self-identified as both Caucasian and another racial or ethnic group were categorized as non-Caucasian.

Analysis Plan

We began our analyses by investigating possible control variables. A number of studies have found that number of caregiver transitions and CVE differ by race/ethnicity (Bray & Hetherington, 1993; Finkelhor, Ormrod, Turner, & Hamby, 2005; Lugaila, 1998). Consequently, we used t-tests and regression analyses to examine whether there were racial/ethnic differences on these variables and whether race/ethnicity moderated the association between the predictor and outcome variables. We also used correlational analyses to examine age and maltreatment severity as potential control variables because older youth tend to be exposed to greater levels of community violence (Finkelhor et al., 2005), while maltreated youth are more likely to exhibit psychosocial problems (Gilbert, et al., 2009).

After examining the bivariate associations among the study variables, we conducted a series of hierarchical multiple regression analyses to test whether CVE moderated the impact of caregiver transitions on T2 levels of psychosocial problems. In step 1, we entered number of caregiver transitions and CVE into the model, which was followed by the addition of the interaction term (caregiver transitions X CVE) in step 2. When raw scores were used as

outcome variables, we controlled for sex and age in the model. We also controlled for baseline levels of the outcome variables. Finally, we controlled for variables that exhibited significant bivariate associations with the predictor or outcome variables.

Results

Descriptive Statistics

The mean number of caregiver transitions youth had experienced prior to the baseline interview was slightly greater than three ($M = 3.34$; $SD = 2.38$; Range: 1–11). Forty-five percent of participants reported fewer than two caregiver transitions, while a quarter of the sample had experienced more than four caregiver transitions. Ninety-seven percent of the sample ($n = 151$) had been exposed to at least one act of community violence in the previous year, with the mean number of acts witnessed approaching 10 ($M = 9.46$, $SD = 8.16$, range = 0–45). The mean maltreatment severity experienced by youth was 3.43 ($SD = 1.12$, range = 1–5). At the T2 interview, 18.5% of the sample (28/151) scored in the clinical range on the CBCL Externalizing Problems scale, 18.2% (27/148) on the TRF Externalizing Problems scale, 8.8% (13/148) on the CBCL Internalizing Problems scale, and 11.3% (17/151) on the TRF Internalizing Problems scale. In terms of trauma symptoms, 2.6% of youth (5/154) scored in the clinical range on the PTS scale of the TSCC.

Bivariate Correlations

Results of t-tests indicated that Caucasian youth did not differ from non-Caucasian youth in their reports of CVE, $t(50) = .29$; $p = .78$, or on number of caregiver transitions, $t(56) = .23$; $p = .82$. We also conducted a series of analyses in which we regressed T2 levels of psychosocial problems on race/ethnicity, number of caregiver transitions, CVE, and the interaction terms between these variables. Results of these analyses indicated that race/ethnicity did not moderate the associations between the predictor and outcome variables.

Table 1 presents the bivariate correlations among the predictor, control, and outcome variables. Older youth were exposed to more community violence. In addition, a greater number of caregiver transitions was associated with higher levels of CVE and with greater T2 levels of externalizing problems (teacher- and caregiver-reported) and teacher-reported internalizing problems. Greater levels of CVE were positively correlated with caregiver- and teacher-reported externalizing problems at T2, teacher-reported internalizing problems at T2, and trauma symptoms at both baseline and T2. Maltreatment severity was not associated with any of the predictor or outcome variables; thus, we excluded this variable from subsequent analyses.

Hierarchical Multiple Regression Analyses

We used hierarchical multiple regression analyses to examine the impact of caregiver transitions and CVE on caregiver- and teacher-reported externalizing problems at T2. In step 1, we entered sex, age, caregiver transitions, CVE, and baseline CBCL externalizing problems into the model. In step 2, we entered the two-way interaction term – caregiver transitions X CVE. Caregiver transitions and CVE were centered at their respective means (Aiken & West, 1991).

Results of the regression analyses are summarized in Table 2. In the models predicting T2 CBCL externalizing problems, only baseline levels of CBCL externalizing problems were a significant predictor in step 1. In step 2, however, the interaction term of caregiver transitions X CVE was significant. In models predicting T2 TRF externalizing problems, only number of caregiver transitions was a significant predictor in step 1. This significant

main effect was qualified by a significant interaction between caregiver transitions and CVE in step 2.

To help interpret these significant interactions, we followed procedures suggested by Aiken & West (1991). Specifically, the relation between caregiver transitions and caregiver- and teacher-reported externalizing problems at T2 was plotted separately for high (1 standard deviation above the mean) and low (1 standard deviation below the mean) levels of CVE. These associations are presented in Figure 1. When CVE was high, a greater number of caregiver transitions were predictive of increases in caregiver-reported (simple slope = .25, $t(145) = 2.60, p < .05$) and teacher-reported (simple slope = .45, $t(145) = 4.40, p < .001$) externalizing problems. When CVE was low, there was no relation between the number caregiver transitions and T2 levels of externalizing problems.

We conducted a second series of hierarchical multiple regression analyses, this time with T2 caregiver- and teacher-reported internalizing problems as the outcome variable. Results of these analyses are presented in Table 3. In the models predicting T2 levels of CBCL internalizing problems, only age and baseline levels of CBCL internalizing problems were significant predictors in step 1 and the interaction term was not predictive of T2 levels of CBCL internalizing problems in step 2. In models predicting T2 TRF internalizing problems, there were significant main effects for age, number of caregiver transitions, and CVE in step 1. These significant main effects were followed by a significant interaction between number of caregiver transitions and CVE in step 2. The relation between caregiver transitions, CVE, and T2 levels of teacher-reported internalizing problems followed a similar pattern to that observed with externalizing problems. When CVE was high, a greater number of caregiver transitions were related to greater levels of internalizing problems (simple slope = .51, $t(145) = 5.07, p < .001$). When CVE was low, however, there was no relation between caregiver transitions and T2 internalizing problems.

We conducted a final series of multiple regression analyses with T2 levels of youth-reported trauma symptoms as the outcome variable. Results of these analyses are presented in Table 3. In step 1, trauma symptoms at baseline and CVE were significant predictors. In step 2, there was a significant interaction of number of caregiver transitions and CVE. The plot of the relation between caregiver transitions and T2 levels of trauma symptoms for those high and low on CVE indicated a similar pattern of results to those observed previously. Specifically, when CVE was high, a greater number of caregiver transitions were associated with increases in trauma symptoms (simple slope = .18, $t(145) = 2.01, p < .05$) and when CVE was low, there was no relation between caregiver transitions and trauma symptoms.

Discussion

The objective of the current study was to examine whether community violence exposure (CVE) moderated the psychosocial consequences associated with caregiver transitions for maltreated youth entering foster care. Consistent with our hypotheses, we found that caregiver transitions and CVE were generally independently predictive of internalizing and externalizing problems. Also consistent with our expectations, these significant main effects were qualified by a significant interaction effect such that youth who had experienced a greater number of caregiver transitions and higher levels of CVE evidenced the greatest increases in psychosocial problems over an 18–22 month span of time.

Results of the current study extend previous research investigating the impact of caregiver transitions on children's psychosocial functioning by examining the role of CVE in moderating this association. Although the current study was unable to examine the mechanisms by which CVE moderates the relation between caregiver transitions and

psychosocial problems, there are several hypotheses that can be gleaned from the extant literature. Youth who experience multiple caregiver transitions report feeling less supported and attached to caregivers (Peterson & Zill, 1986; Thomson et al., 2001). These feelings of isolation may be exacerbated by community-level stressors such as CVE. Youth who witness or are the victims of CVE often report positive mental health and emotional benefits of talking with supportive caregivers (Kliewer et al., 1998; Overstreet et al., 1999; Saltzman et al., 2001). At the opposite end of the spectrum, youth who experience multiple caregiver transitions and do not receive help or support in dealing with CVE likely feel even more disconnected from caregivers. Thus, the negative psychosocial consequences associated with caregiver transitions and CVE observed in the current study may result from youth being unable to cope effectively with the trauma associated with CVE, because of feelings of anger and frustration towards caregivers, or both. Future studies examining perceptions of caregiver support are needed to help shed light on the mechanisms involved in the development of psychosocial problems for youth exposed to greater levels of caregiver instability and a high degree of CVE.

Instability in other social domains may also help to explain the current study's findings. Caregiver transitions often mean concomitant disruptions in children's peer relationships, the schools they attend, and even sibling relationships (Herrenkohl et al., 2003). Given that instability within these various domains is associated with negative long-term outcomes (Herrenkohl et al., 2003; Rumberger & Larson, 1998), it is likely that at least some of the variance in the psychosocial problems observed in the current study can be attributed to disruptions in these other significant relationships. O'Donnell and colleagues found that the impact of parent support in promoting resilience among youth exposed to high levels of community violence decreased across time, the influence of school support increased over time (O'Donnell, Schwab-Stone, & Muey, 2002). Thus, future studies should examine the impact of instability across a variety of domains in predicting long-term mental health and behavioral problems for youth entering into foster care.

Findings from the current study have implications for the practices of child welfare services. The psychosocial problems of maltreated youth entering foster care in the current study increased over time when they had experienced high levels of caregiver transitions and CVE. Given that youth in foster care who have high levels of psychosocial problems are at an increased risk of experiencing placement disruptions (Chamberlain et al., 2006; James, 2004; Newton et al., 2000), it is imperative that child welfare services tailor their involvement to meet the needs of these youth. One strategy is to involve foster caregivers of youth with a history of high levels of caregiver transitions and CVE in effective, evidence-based interventions aimed at behavior management. Results from several randomized controlled trials indicated that involving foster caregivers in a behavior management intervention early in the placement reduces children's psychosocial problems and significantly lessens the likelihood of placement disruptions (Dozier et al., 2009; Fisher, Burraston, & Pears, 2005; Price et al., 2008). Child welfare services should also work with biological parents to increase their ability to help their children cope with CVE. Findings from several studies suggest that parents play a key role in shielding their children from the harmful effects of CVE. Parental involvement in community organizations, as well as increased levels of parental emotional support, have been found to attenuate the impact of CVE (Bell, Flay, Paikoff, 2002; Horowitz, McKay, & Marshall, 2005; Rosario, Salzinger, Feldman, & Ng-Mak, 2008).

Strengths of the current study include the use of a longitudinal design and multi-informant reports of internalizing and externalizing problems. By controlling for baseline levels of psychosocial problems, we were able to examine how caregiver transitions and CVE impacted changes in behavioral and mental health outcomes over the study period. An

understanding of the etiology and development of early adolescent psychosocial problems among maltreated youth is crucial to helping researchers design effective interventions. In addition, with our use of youth, caregiver, and teacher reports to assess the study's constructs, we were able to minimize the impact of shared reporter variance.

Despite these strengths, several limitations of our investigation must be considered when interpreting the results. First, we cannot say with certainty that a greater number of caregiver transitions and high levels of CVE, acting in concert, caused increases in internalizing and externalizing problems over the study period. Although demographic variables that might have had an impact were considered as possible covariates, it is possible that other, unaccounted for individual and sociodemographic factors (e.g., IQ, genetic predisposition, family income) may have influenced the findings. Additionally, early childhood behavioral and/or psychosocial problems may have led to greater caregiver instability prior to our baseline assessment, thus confounding our ability to determine temporal precedence (Newton et al., 2000).

The current study adds to the field's understanding of the factors that contribute to poor behavioral and mental health outcomes for maltreated youth who have experienced a high number of caregiver transitions before being placed into foster care. Although the negative outcomes associated with caregiver transitions and maltreatment have been well studied, the moderating impact of community-level factors, until now, has not. From a practical perspective, the data from the current study provide child welfare services with information on those factors that may increase a child's chances of experiencing placement disruption. This information is crucial in helping those entrusted with positively impacting the lives of maltreated youth to make decisions that are effective.

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Figure 1. Caregiver and teacher reports of externalizing problems at T2 as a function of caregiver transitions and community violence exposure.

Table 1

Bivariate Correlations Among Study Variables (n = 156)

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	–	–.01	.10	.18*	.04	.00	–.05	–.12	–.08	–.13	–.01	.06
2. Maltreatment severity		–	.14	.15	–.06	–.09	.07	.01	–.01	.03	.07	.04
3. Number of caregiver transitions			–	.23**	.10	.11	.16*	.09	.25**	.28**	.15	.09
4. CVE				–	.11	.01	.18*	.11	.18*	.23**	.26**	.39***
5. CBCL externalizing problems at T1					–	.60***	.40***	.30***	.17*	.09	.16*	.13
6. CBCL internalizing problems at T1						–	.32***	.50***	.11	.14	.15	.01
7. CBCL externalizing problems at T2							–	.71***	.35***	.13	.10	.26**
8. CBCL internalizing problems at T2								–	.34***	.16*	.11	.17*
9. TRF externalizing problems at T2									–	.48***	.06	.16*
10. TRF internalizing problems at T2										–	.18*	.22**
11. PTSS at T1											–	.31***
12. PTSS at T2												–

Note. CVE = community violence exposure; CBCL = Child Behavior Checklist; TRF = Teacher Report Form; PTSS = posttraumatic stress symptoms.

*
p < .05.

**
p < .01.

p < .001.

Table 2
Hierarchical Regression Analyses Predicting Externalizing Problems at T2

Variables	B	SE	β	s^2	R^2
Models Predicting T2 CBCL Externalizing Problems					
Step 1					.20***
Age	-1.14	.95	-.09	.01	
Sex	-.82	1.64	-.04	.00	
CBCL externalizing problems at T1	.32	.06	.38	.14*	
Number of caregiver transitions	.45	.35	.10	.01	
CVE	.17	.11	.12	.01	
Step 2					.23***
Number of caregiver transitions X CVE	.07	.03	.18	.03*	
Models Predicting T2 TRF Externalizing Problems					
Step 1					.13**
Age	-1.39	1.10	-.10	.01	
Sex	3.33	1.93	.14	.02	
CBCL externalizing problems at T1	.11	.08	.12	.01	
Number of caregiver transitions	1.19	.43	.22	.05**	
CVE	.24	.13	.15	.02	
Step 2					.18***
Number of caregiver transitions X CVE	.16	.05	.24	.05**	

Note. CVE = community violence exposure; CBCL = Child Behavior Checklist; TRF = Teacher Report Form.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 3
Hierarchical Regression Analyses Predicting Internalizing Problems at T2

Variables	B	SE	β	sr^2	R^2
Models Predicting T2 CBCL Internalizing Problems					
Step 1					.30***
Age	-1.60	.66	-.17	.03*	
Sex	-1.97	1.14	-.12	.01	
CBCL internalizing problems at T1	.48	.07	.50	.25***	
Number of caregiver transitions	.08	.25	.02	.00	
CVE	.13	.07	.13	.01	
Step 2					.30***
Number of caregiver transitions X CVE	.02	.02	.05	.00	
Models Predicting T2 TRF Internalizing Problems					
Step 1					.16***
Age	-1.44	.63	-.18	.03*	
Sex	.50	1.10	.04	.00	
CBCL internalizing problems at T1	.10	.07	.11	.01	
Number of caregiver transitions	.73	.25	.23	.05**	
CVE	.21	.07	.22	.05**	
Step 2					.23***
Number of caregiver transitions X CVE	.11	.03	.28	.07**	
Models Predicting T2 Trauma Symptoms					
Step 1					.20***
Trauma symptoms at T1	.22	.07	.23	.05**	
Number of caregiver transitions	-.08	.29	-.02	.00	
CVE	.40	.09	.35	.10***	
Step 2					.24***
Number of caregiver transitions X CVE	.07	.03	.21	.04**	

Note. CVE = community violence exposure; CBCL = Child Behavior Checklist; TRF = Teacher Report Form.

* $p < .05$.
 ** $p < .01$.
 *** $p < .001$.