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Does Community Violence Exposure Predict Trauma Symptoms in a Sample of Maltreated Youth in Foster Care?

Edward F. Garrido,

Kempe Center for the Prevention and Treatment of Child Abuse and Neglect University of Colorado Denver School of Medicine

Sara E. Culhane,

Kempe Center for the Prevention and Treatment of Child Abuse and Neglect University of Colorado Denver School of Medicine

Tali Raviv, and

Northwestern University, Feinberg School of Medicine, Children's Memorial Hospital

Heather N. Taussig

Kempe Center for the Prevention and Treatment of Child Abuse and Neglect University of Colorado Denver School of Medicine

Abstract

Previous studies find that childhood exposure to family and community violence is associated with trauma symptoms. Few studies, however, have explored whether community violence exposure (CVE) predicts trauma symptoms after controlling for the effects associated with family violence exposure (FVE). In the current study, CVE and FVE were examined in a sample of 179 youth with a recent history of maltreatment. CVE was associated with trauma symptoms after controlling for FVE, but FVE was not associated with trauma symptoms after controlling for CVE. In addition, negative coping strategies (e.g., self-harm, interpersonal aggression) partially mediated the association between CVE and trauma symptoms. These findings are discussed in terms of their implications for interventions aimed at addressing the needs of children exposed to violence.

In the United States, family violence exposure (FVE) and community violence exposure (CVE) among children is a pervasive and serious problem. Recent estimates indicate that 30% of youth in the United States have been exposed to at least one act of domestic violence in the previous year (McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006), with a large majority of these children (between 75% and 95%) also experiencing physical abuse (McCloskey, 2001; Smith-Slep & O'Leary, 2005). Similarly, a high percentage of youth are subjected to CVE. Studies involving youth from urban settings find that between 75% and 90% of adolescents have witnessed at least one act of violence in their neighborhoods (Malik, 2008; McCabe, Lucchini, Hough, Yeh, & Hazen, 2005; Weist, Acosta, & Youngstrom, 2001).

The acts of violence children are exposed to in their homes and communities involve a number of frightening and dangerous events, including witnessing individuals being choked, stabbed, and shot. In addition, the majority of youth exposed to FVE and CVE witness acts of violence across a variety of contexts and across prolonged periods of time (Graham-Bermann, Gruber, Howell, & Girz, 2009; Horowitz, Weine, & Jekel, 1995; Schwab-Stone et. al., 1995). Given the severity, pervasiveness, and chronicity of the violence youth are witness to, it is not surprising that researchers often find elevated levels of trauma symptomatology among youth exposed to community and family violence (Fowler,

Tompsett, Braciszewski, Baltes, & Jacques-Tiura, 2009; Horowitz, McKay, & Marshall, 2005; Margolin & Gordis, 2000; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003).

Surprisingly, despite these parallel findings across the community and family violence literatures and the high rate of co-occurrence between CVE and FVE (Lynch & Cicchetti, 1998; McCabe et al., 2005), few studies have explored the question of whether one type of violence predicts trauma symptoms after controlling for the other. Lynch and Cicchetti (1998) have theorized that the severity of the effects associated with violence exposure occurring across multiple contexts is dependent on the proximity of the context to the child. According to their framework, violence that occurs in environments more proximal to the child (e.g., in the home) should have the greatest impact on functioning, while events that take place in contexts more distal to the child (e.g., in the community) should have less of an impact. Thus, FVE is expected to be more strongly associated with trauma symptoms relative to CVE. A question that remains, however, is whether CVE predicts trauma symptoms after accounting for FVE.

To date, few studies have compared the impact of FVE and CVE on trauma-related symptoms. Findings from those studies that have explored these associations have been mixed. Mrug, Loosier, and Windle (2008) found that CVE did not predict trauma-related symptoms (e.g., anxiety, depression) after accounting for the impact of FVE, while other studies have found independent effects of CVE and FVE on trauma symptoms (Linares et al., 2001; Malik, 2008). In addition to these inconsistencies in the research literature, to our knowledge, no studies have examined the relative impact of CVE and FVE on trauma symptoms for a sample of maltreated youth in foster care. Given that this population of youth is at significant risk of witnessing violence (Stein, et al., 2001) and of experiencing clinical levels of mental health problems (Garland, Hough, McCabe, Yeh, Wood, & Aarons, 2001), an examination of the trauma symptom impact associated with CVE and FVE is warranted.

Coping as a Mediator of the Association between Violence Exposure and Internalizing Problems

Despite the apparent consistency in findings linking community and family violence exposure to trauma symptoms, most youth exposed to violence do not evidence elevated levels of trauma symptoms (Daniel & Wassell, 2002; Richters & Martinez, 1993), nor is there unequivocal evidence of an association between these two phenomena. In Wilson and Rosenthal's (2003) meta-analysis of the association between CVE and trauma-related symptoms, for example, there was a considerable amount of variability in the range of correlation coefficients reported across studies, with r 's ranging from $-.05$ to $.57$. As a result, researchers have concluded that the association between violence exposure and trauma symptoms may not be a direct one. Rather, it is likely that there are mechanisms that mediate the violence exposure-trauma symptoms association (see Margolin & Gordis, 2000 for a review).

One mechanism that has been examined as a possible mediator of the association (or lack thereof) between violence exposure and trauma symptoms involves the coping strategies children use as a response to stressful experiences. Researchers have differentiated between positive/adaptive and negative/maladaptive coping strategies based on the strategy's potential to result in positive adjustment. Negative or maladaptive coping is generally defined as strategies that either do not address the stressor (e.g., avoidance, withdrawal) or are harmful to others and/or self (e.g., aggression towards others, self-criticism). Coping strategies defined as positive or adaptive, on the other hand, involve strategies that either deal directly with the stressor (e.g., problem solving through information seeking) or that

involve efforts aimed at self-care (e.g., seeking social support, expressing emotions; Berman, Kurtines, Silverman, & Serafini, 1996; Dempsey, 2002).

The use of positive and negative coping strategies as a response to community and family violence exposure, and the resulting impact these strategies have on trauma-related symptoms, has been explored across a number of cross-sectional and longitudinal studies. Findings from these studies indicate that greater levels of CVE and FVE are associated with increased use of negative coping strategies, and that the use of these strategies predicts negative psychological outcomes, including depression, anxiety, post-traumatic stress symptoms, and suicidality (Berman et al, 1996; Cohen et al., 1996; Dempsey, 2002; Krause, Mendelson, & Lynch, 2003; Merrill, Thomsen, Sinclair, Gold, & Milner, 2001; Rosario, et al., 2008). Interestingly, for youth exposed to high levels of community and family violence, the use of positive coping strategies does not appear to be associated with lower levels of trauma symptoms (Dempsey, 2002; Edlynn, et al, 2008).

While the results of the studies noted above appear to suggest that negative coping strategies mediate the association between violence exposure and trauma-related symptoms, no studies, to our knowledge, have examined the coping strategies of youth exposed to violence across multiple contexts. The question remains whether the coping strategies of youth exposed to both community and family violence serve a similar function across these different violence types. Thus, a second objective of the current study was to examine whether the positive and negative coping strategies of maltreated youth mediate the association between community and family violence exposure and trauma symptoms.

The Current Study

The current study examined the associations between CVE, FVE, coping strategies, and trauma symptoms in a sample of youth who had all been recently placed in foster care due to abuse and/or neglect. The objectives of the study were twofold: 1) To examine whether CVE contributed in the prediction of trauma symptoms over and above those effects attributable to FVE (using a measure that combined both physical abuse and the occurrence of DV in the home); 2) To examine whether children's coping strategies mediated the association between violence exposure (both community and family violence) and trauma symptoms.

Based on the research reviewed, it was expected that family and community violence exposure would be independently associated with trauma symptoms. However, because youth in the current study had all been recently maltreated, it was expected that the association between CVE and trauma symptoms would be accounted for by co-occurring FVE. It was also expected, based on the research reviewed above, that negative coping strategies would mediate the association between violence exposure (regardless of type) and trauma symptoms, while positive coping would not have an attenuating impact.

Methods

Participants

Recruitment—Participants in the current study included youth who were recruited each summer between 2002 and 2006 for a randomized controlled trial (RCT) of a preventive intervention for 9–11 year olds placed in foster care (see Taussig, Culhane, & Hettleman, 2007 for a description of the intervention). Youth were eligible for the RCT if: 1) they had been court-ordered into foster care within the preceding 14 months, 2) the court order was due to maltreatment of some type, and 3) they remained in foster care at the time of the baseline interview. Ninety-three percent of those youth meeting eligibility requirements

were enrolled in the study. The current study examined data collected at the baseline assessment (pre-randomization) only.

Although 215 youth were interviewed at baseline, the sample for this study included data from 179 participants. Data were excluded for the following reasons: twenty-two children were siblings of others included in the sample (when siblings were interviewed, one was chosen at random to be included in the current study's analyses); nine children's scores on achievement and intelligence tests indicated significant cognitive impairment (full scale IQ < 70); four children were not proficient enough in English to comprehend study questions; one child had missing data on one or more of the violence exposure variables.

Participant characteristics—The sample of 179 youth was 49.2% ($n = 88$) female, with a mean age of 9.93 years ($SD = .85$). A significant number of youth in the sample reported belonging to more than one racial or ethnic category (37.6%), thus we used non-exclusive categories (percentages do not sum to 100%) to assess the racial/ethnic composition of the sample. Almost half of the sample (49.2%) self-identified as Caucasian, 45.8% as Hispanic, 30.2% as African-American, 7.3% as Native American, and 2.8% as Asian or Pacific Islander. Based on child welfare records and caregiver reports, youth had been in foster care at the time of the baseline interview an average of 6.16 months ($SD = 3.64$) and they had been at their current placement an average of 4.94 months ($SD = 3.74$).

Procedure

Youth were interviewed at their current residence (e.g., foster home, kinship home, residential treatment facility) or other community location with the stipulation that they had been at their placement for at least three weeks. Children were paid \$40 for their participation. The study protocol was approved by the Colorado Multiple Institutional Review Board and informed consent was obtained from caregivers and assent was obtained from youth prior to beginning the baseline interview.

Measures

Family Violence Exposure—Legal petitions and caseworker intake reports of participants' social histories (child welfare records' narrative of the history and events preceding the legal filing that led to the child's removal from the home) were consensus-coded by trained research assistants using the Maltreatment Classification System (Barnett, Manly, & Cicchetti, 1993). Although a number of maltreatment types were coded, the current study examined the occurrence of physical abuse and domestic violence only. We coded only physical abuse and domestic violence that occurred within the previous two years because we were concerned that not all caseworkers would reliably include information about past history of abuse. Physical abuse was coded as having occurred to the participant (0 = Did not occur; 1 = Occurred) when it was clear from the report or petition that a caregiver, other family member, or other adult had inflicted a physical injury upon the target child by other than accidental means. Domestic violence was coded (0 = Did not occur; 1 = Occurred) when adult-to-adult violence (regardless of relationship status) had occurred in the participant's home. Domestic violence was operationally defined as acts of emotional abuse (e.g., name calling, intimidation), efforts to control a partner (e.g., stopping a partner from getting or keeping employment), stalking, actual or threatened physical abuse, and sexual assault. Discrepancies in coders' ratings were resolved with the guidance of one of the project's senior investigators. Physical abuse and domestic violence occurrence scores were combined to form a FVE composite, with possible scores ranging from 0 (the occurrence of neither type of violence) to 2 (the occurrence of both types of violence).

Community Violence Exposure—An adapted, 12-item version of the “Things I Have Seen and Heard” scale (Richters & Martinez, 1993) was used as a measure of community violence exposure. Youth were asked to indicate the number of times in the past year they had seen or heard each of the following in their neighborhood: *guns being shot; somebody get arrested; somebody being beaten up; drug deals; somebody get stabbed; somebody get shot; a dead body (not at a funeral); gangs in the neighborhood; somebody pull a gun on another person; own house broken into; somebody pull a knife on another person; somebody steal something from a store or another person’s house*. Responses were provided on a five-point scale (0, “never”, to 4, “four or more times”) and were summed to form a CVE composite score. The internal consistency for the items was acceptable ($\alpha = .81$). In order to determine whether CVE being reported in the current study had occurred in the community from which the child was removed or in the community in which they currently lived, participants were asked, “Did most of the things you saw happen while you were living here (current home)?”

Coping—The Life Events and Coping Inventory (LECI; Dize-Lewis, 1988) was used to assess youth’s use of different coping strategies. The LECI is a 49-item measure that asks participants to rate, on a three-point scale (1, “not likely”, to 3, “very likely”), the likelihood of engaging in various coping strategies as a response to stressful experiences. For data reduction purposes, a principal-components, exploratory factor analysis with varimax rotation was conducted on the 49 items. Items were retained if they loaded .35 or above on a particular factor and items were dropped if they simultaneously loaded on two factors at .35 or above. A scree plot suggested a two-factor solution, which together explained 27.7% of the variance. The two factors were named Positive Coping and Negative Coping. The Positive Coping factor was comprised of 23 items ($\alpha = .88$) that included strategies involving expression (e.g., “talking to a brother/sister/friend” and “write about it for yourself, like in a diary”) and relaxation (e.g., “relax; try to be less tense” and “go to sleep or sleep it off”). The Negative Coping factor was comprised of 14 items ($\alpha = .82$) that included strategies involving interpersonal aggression (e.g., “hit someone or hurt someone physically”) and self-destruction (e.g., “take drugs,” “hurt yourself physically”). The mean of participants’ responses across the 23 positive and 14 negative coping items were computed to derive separate positive and negative coping scores.

Trauma Symptoms—As a measure of trauma symptoms, youth were administered the Trauma Symptom Checklist for Children (TSCC; Briere, 1996). The TSCC is a 54-item, self-report measure of trauma-based symptoms and is comprised of six clinical subscales: dissociation, post-traumatic stress (PTS) symptoms, anxiety, depression, anger, and sexual concerns. In the current study we examined participants’ scores on the 10-item dissociation and 10-item PTS symptoms scales only. For each item, participants were asked to indicate “how often each thing happens to you,” with responses scored on a four-point scale (0, “never” to 3, “almost all of the time”). Participants’ raw scores across the dissociation and PTS scales were summed to form a trauma symptom composite variable.

Analyses

A number of studies have found sex differences in childhood prevalence rates for violence exposure (Richters & Martinez, 1993; Schwab-Stone et al, 1995), thus, chi-square analyses and t-tests were used to examine whether boys and girls differed from one another in how often they were exposed to community and family violence. In addition, correlational analyses were conducted separately by participants’ sex because previous research has found differences in the types of problems associated with CVE and FVE for boys and girls (Holt, Buckley, & Whelan, 2008). In addition, participants’ age was included in correlational analyses and examined as a potential control variable because older youth are more likely to

be exposed to community violence (Finkelhor, Ormrod, Turner, & Hamby, 2005; Weist et al., 2001).

After examining the bivariate associations among the study variables, a multiple regression analysis was conducted to test whether the CVE composite variable predicted trauma symptoms after controlling for the effects associated with the FVE composite variable. The two-way, violence interaction term, FVE X CVE, was included in the model to account for the possibility that the impact of violence experienced in one context might be dependent on violence experienced in the other context (Cicchetti & Lynch, 1993). This initial regression analysis was followed by a series of multiple regression analyses aimed at determining whether the three remaining conditions of mediation outlined by Baron and Kenny (1986) were met: 1) whether the predictor variable (violence exposure) was significantly associated with the hypothesized mediator (coping strategy); 2) whether the hypothesized mediator (coping strategy) predicted the outcome variable (trauma symptoms); and 3) whether the direct effect of violence exposure on trauma symptoms was reduced or eliminated with the inclusion of coping strategy in the model. Only variables that exhibited significant bivariate associations with the mediator or outcome variables were included in the above analyses. In addition, because Baron and Kenny's approach has been found to suffer from low power (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002), Sobel's Test (1982) was used to determine whether the indirect effect was significant. Finally, MacKinnon & Dwyer (1993) have developed a method for computing the proportion of the effect mediated in which the indirect effect (which is equal to the product of the coefficient of the predictor variable on the mediator and the mediator on the outcome variable) is divided by the effect of the predictor variable on the outcome variable (without the mediator in the model). The proportion of the effect mediated was calculated for indirect effects that were determined to be significant.

Results

Rates of Violence Exposure

Almost all of the participants ($n = 171$; 95.5%) reported witnessing at least one act of community violence in the previous year, with the average number of acts of violence witnessed approaching ten ($M = 9.67$; $SD = 8.07$; $Range = 0-45$). The majority of participants who were exposed to community violence ($n = 156$; 91.2%) reported they witnessed the violence in the communities from which they were removed, rather than in their foster-care communities. In terms of family violence, 35.8% ($n = 64$) of participants had not been exposed to any type of family violence; 47.5% ($n = 85$) of participants were removed from homes where one type of family violence had occurred; and 16.8% ($n = 30$) were removed from homes where both physical abuse and domestic violence had occurred.

Table 1 presents the results of chi-square and t-test analyses used to examine whether there were sex differences in the percentages of participants exposed to family and community violence. Males and females did not differ from one another in their exposure to physical abuse, nor were there sex differences in exposure to domestic violence. A t-test indicated that males and females also did not differ from one another in how many acts of community violence they had witnessed in the previous year. Finally, males and females did not differ from one another in their exposure to multiple types of violence (e.g., physical abuse + domestic violence; physical abuse + domestic violence + community violence).

Bivariate Correlations

Table 2 presents the bivariate correlations among the study variables for males and females, along with variable means and standard deviations. For both sexes, higher levels of CVE

were associated with greater use of negative coping strategies and more trauma symptoms. CVE, however, was not associated with positive coping strategies for either sex. FVE, for both males and females, was not associated with either of the coping strategies, nor was it associated with trauma symptoms. In terms of the coping variables, for both sexes, greater use of negative coping was associated with more trauma symptoms, but positive coping was not. Finally, age was associated with CVE and positive coping for boys only. Older boys were more likely to have been exposed to higher levels of community violence and were less likely to engage in positive coping strategies. Because there were no sex differences in the pattern of correlations among the study variables, participants' sex was not included in multiple regression analyses as a control variables. Participants' age, however, was included in all models.

Analyses Examining the Association between Violence Exposure and Trauma Symptoms

Table 3 presents the results of the multiple regression analyses examining the association between violence exposure and trauma symptoms. In the first regression model, trauma symptoms were predicted from the FVE and CVE variables and participants' age. Results of the analysis indicated that greater CVE was associated with higher levels of trauma symptoms after controlling for FVE and participants' age. FVE was not associated with trauma symptoms after controlling for CVE and age. Finally, age did not predict trauma symptoms after controlling for CVE and FVE. The FVE X CVE interaction term, when included in the model, did not significantly predict trauma symptoms ($\beta = -.04, p = .79$).

Because positive coping was not associated with trauma symptoms, the mediational analyses that followed the first regression model focused on negative coping as a possible mediator. In addition, because CVE was significantly associated with trauma symptoms and FVE was not, negative coping was examined as a mediator of the CVE-trauma symptom association only. FVE, however, was retained in the mediational models as a covariate. A multiple regression analysis was conducted predicting negative coping from the violence-exposure variables and participants' age. Results of this model indicated that higher levels of CVE were associated with greater use of negative coping strategies after controlling for FVE and participants' age. The occurrence of FVE, on the other hand, was not associated with higher levels of negative coping after controlling for CVE and participants' age. Participants' age was not significantly associated with the use of negative coping after controlling for CVE and FVE. Finally, the FVE X CVE interaction term did not significantly predict negative coping when included in the model ($\beta = -.05, p = .73$).

A multiple regression analysis predicting trauma symptoms from negative coping, while controlling for participants' age, was conducted next. Results of the analysis indicated that higher levels of negative coping, after controlling for age, were associated with a greater number of trauma symptoms. Age, however, was not significantly associated with trauma symptoms. To examine whether negative coping attenuated the association between CVE and trauma symptoms, CVE and negative coping were entered into a final regression model predicting trauma symptoms, along with FVE and age as covariates. Results indicated that the association between negative coping and trauma symptoms remained significant and the association between CVE and trauma symptoms, although significant, was considerably reduced. The results of the Sobel Test indicated a significant indirect effect of CVE on trauma symptoms, $z = 3.17, p < .01$. Using MacKinnon and Dwyer's (1993) method for computing proportion of the effect mediated, we found that 30% of the effect of CVE on trauma symptoms was attenuated by negative coping.

Discussion

The objective of the current study was to examine whether degree of community violence exposure (CVE) predicted trauma symptoms after controlling for family violence exposure (FVE). Using a sample of maltreated children in foster care, increased CVE was significantly associated with higher levels of trauma symptoms, even after controlling for FVE and participants' age. FVE, on the other hand, was not associated with trauma symptoms. In addition, consistent with previous research examining community violence exposure among non-maltreated samples (Berman et al, 1996; Dempsey, 2002; Rosario, et al., 2008), CVE was associated with increased use of negative coping strategies, which, in turn, predicted higher levels of trauma symptoms. Mediational analyses revealed that negative coping partially mediated the association between CVE and trauma symptoms, accounting for 30% of the effect. Consistent with previous studies and our hypotheses, positive coping was not associated with trauma symptoms.

Using a sample at high risk for FVE, the results of the current investigation add to previous studies that have found that CVE predicts negative psychological outcomes independent of FVE (Linares et al., 2001; Malik, 2008). In the current study, almost half of youth with CVE had been removed from homes where DV had occurred and almost a third had been the victim of physical abuse. In addition, it is important to point out that all of the participants in the current study had experienced maltreatment of some sort (e.g., neglect, emotional abuse) prior to being removed from their homes. Thus, these findings indicate that exposure to violence in a child's community is associated with increased levels of trauma symptoms even for very high-risk youth and even after controlling for those effects associated with family violence.

One possible explanation for the link between CVE and trauma symptoms observed in the current study may have been the inability of participants to feel safe and secure in their environment (Schwab-Stone et al, 1995), which is a prerequisite of optimal emotional functioning (Osofsky, 1999). Given that all of the youth in the current study had experienced a recent incident of maltreatment, it seems reasonable to expect that a large number of them may have felt unsafe in their homes (before being removed by social services). However, those participants who were exposed to a high level of community violence may have felt unsafe both at home and in their community. These pervasive experiences of feeling unsafe may have had detrimental psychological consequences for these youth.

An alternative explanation for the association between CVE and trauma symptoms may relate to the scaling of CVE. Because the CVE composite variable represented a count of the number of incidents of community violence youth had been exposed to in the previous year, it may have been better at detecting multiple victimizations than the FVE composite variable (which represented a sum of the *occurrence* of physical abuse and domestic violence and ranged from 0–2). The distinction between multiple and individual victimizations is an important one. Finkelhor and colleagues found that, compared to a variety of individual victimization types (e.g., physical abuse, sexual abuse, etc.), a measure of multiple victimization experiences was a stronger predictor of increases in trauma symptoms, even after accounting for baseline levels of trauma symptoms (Finkelhor, Ormrod, & Turner, 2007).

Implications

The current study suggests that CVE is associated with trauma symptoms independent of the impact of FVE. These findings have important implications for researchers interested in designing interventions aimed at positively impacting the well-being of youth exposed to violence. More specifically, although there have been a number of interventions developed

for youth exposed to DV (see Graham-Bermann & Edleson, 2001 for a review) and child maltreatment (see MacMillan et al., 2009 for a review), there have been few evidence-based interventions that specifically target community violence exposure (Horowitz et al., 2005). Those interventions that have been developed to address CVE have tended to adopt approaches used with abused and maltreated youth (Stein, Jaycox, Kataoka, Rhodes, & Vestal, 2003). Although these approaches have proven successful in treating trauma symptoms related to CVE, they often ignore issues relevant to the prevention of community violence re-victimization (e.g., formation of social supports, greater supervision from caregivers).

Findings from the current study also suggest that researchers interested in designing interventions targeting the effects of community violence should focus on modifying youth's coping strategies. More specifically, results indicate that exposure to CVE is associated with increased use of negative coping strategies, which are themselves associated with a greater number of trauma symptoms. Consequently, intervention efforts should strive to help youth develop alternative means of coping with community violence-related stressors. Although results from the current study indicate that positive coping strategies are not associated with lower levels of trauma symptoms for youth exposed to violence, it may be the case that there are individual-and/or family-level moderators that determine the level of effectiveness of adaptive coping mechanisms. One potential moderator may be parental involvement. 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 both been found to attenuate the impact of CVE (Bell, Flay, Paikoff, 2002; Horowitz et al., 2005; Rosario et al., 2008).

Limitations

Several limitations must be considered in interpreting findings from the current study. First, the design of the study was cross-sectional and knowledge of childhood violence exposure and trauma symptoms was limited to the events immediately prior to the child's removal from the home. Thus, in the absence of longitudinal data, it can only be hypothesized that violence exposure led to negative coping strategies, which, in turn, impacted the development of trauma symptoms. It is certainly plausible, however, that the direction of causality among the study variables may be opposite of what would be expected. For example, some theorists have suggested that individuals engage in avoidant coping as a reaction to intrusive thoughts associated with a traumatic experience (Creamer, Burgess, & Pattison, 1992). As a consequence of the avoidance of key environmental cues, youth may be more likely to experience family and community violence (DePrince, 2005).

A second limitation involved the exclusive reliance on youth self-reports to gather data. In assessing coping style, Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth (2001) have pointed out that self-reports, particularly youth's self-reports, can be plagued by poor recall and a reluctance on the part of participants to report the use of ineffective or socially undesirable coping strategies. In addition, there is some evidence to suggest that the recall of internalizing problems among children is impacted by individual differences (e.g., age, cognitive functioning) and abuse characteristics (e.g., type of abuse; Eisen, Goodman, Qin, Davis, & Crayton, 2007).

Despite these potential methodological limitations, when a child is placed into foster care, youth self-reports may be more reliable than those obtained from caregivers. Foster parents are likely to have little or no knowledge of the child's home or community environment before they were placed into foster care by social services. In the current study, for example, because the overwhelming majority of community violence witnessed and reported on by youth had taken place in their pre-placement community, caregivers would have found it

difficult to provide reliable estimates of this exposure. Despite the strengths associated with foster-youth self report, future research studies examining the associations among violence exposure, coping style, and trauma symptoms should strive to use a multi-informant (e.g., caregivers, youth, teachers) and multi-method (e.g., observations, school records) approach when measuring these variables.

Finally, it is important to point out that the coping measure used in the current study did not specifically assess strategies for dealing with CVE. Rather, the measure asked participants to consider how they handle stressful situations in general. It is possible that the heightened level of trauma symptoms associated with the use of negative coping strategies may not have occurred as a result of CVE. Instead, increases in trauma symptoms may have occurred in response to youth's attempts to generalize these strategies to non-violent situations (Tolan et al, 2002). In other words, negative coping strategies may have been effective in addressing CVE, but they may have been ineffective in dealing with the demands of academics, friendships, or other stressful social situations.

Previous research has shown that childhood exposure to both family and community violence has a negative impact on psychological functioning. Although the impact of these violence exposure types have typically been examined in isolation of one another, their high rate of co-occurrence demands that their comparative impacts be considered. Prevailing theories stress the importance of proximity in predicting the impact of violence exposure on children's psychological functioning. However, the results of the current study suggest that the psychological impact of violence occurring in a child's community should also be considered, particularly among youth at high-risk of experiencing violence within their homes.

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Table 1

Exposure to Violence by Participants' Sex

| Type of Violence Exposure | Child's Sex | | χ^2 | <i>t</i> |
|---|-------------|---------|----------|----------|
| | Males | Females | | |
| Physical Abuse | 26.4% | 33.0% | .93 | |
| Domestic Violence | 47.3% | 55.7% | 1.27 | |
| CVE Composite | 9.48 | 9.86 | | .31 |
| Physical Abuse + Domestic Violence | 15.4% | 18.2% | 2.91 | |
| Physical Abuse + Domestic Violence + Community Violence | 7.7% | 14.8% | 3.00 | |

Note. CVE = Community Violence Exposure; There were no significant sex differences in violence exposure based on χ^2 and independent samples t-tests.

Table 2

Bivariate Correlations among Study Variables by Participants' Sex

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | <i>M</i> _{boys} (SD) | <i>M</i> _{girls} (SD) |
|--------------------|------|-------|-------|------|-------|-------|-------------------------------|--------------------------------|
| 1. FVE Composite | -- | .04 | .13 | -.07 | .02 | .05 | .74 (.71) | .89 (.69) |
| 2. CVE Composite | .08 | -- | .25** | .03 | .28** | .27* | 9.48 (7.78) | 9.86 (8.41) |
| 3. Negative Coping | .15 | .30** | -- | .08 | .36** | .19 | 1.15 (.24) | 1.13 (.20) |
| 4. Positive Coping | -.01 | .04 | .01 | -- | .07 | -.22* | 1.94 (.46) | 1.93 (.35) |
| 5. Trauma Symptoms | .05 | .33** | .44** | .11 | -- | -.03 | 7.02 (4.55) | 7.87 (4.76) |
| 6. Age | .16 | .12 | .16 | .02 | .00 | -- | 9.87 (.87) | 9.99 (.84) |

Note. Males' correlation coefficients are above the diagonal (*n* = 91), while females' coefficients are below the diagonal (*n* = 88); CVE = Community Violence Exposure; FVE = Family Violence Exposure

* *p* < .05;

** *p* < .01

Table 3

Regression Coefficients for Models Predicting Negative Coping and Trauma Symptoms

| Variables | b | SE (b) | β | t |
|---|-------|--------|---------|--------|
| Model Predicting Trauma Symptoms | | | | |
| CVE Composite | .17 | .04 | .30 | 4.05** |
| FVE Composite | .09 | .48 | .01 | .19 |
| Age | -.51 | .40 | -.09 | -1.26 |
| Model Predicting Negative Coping | | | | |
| CVE Composite | .01 | .00 | .24 | 3.28** |
| FVE Composite | .02 | .01 | .10 | 1.43 |
| Age | .02 | .01 | .12 | 1.56 |
| Model Predicting Trauma Symptoms (without FVE/CVE Composites) | | | | |
| Negative Coping | 14.94 | 2.54 | .41 | 5.87** |
| Age | -.57 | .38 | -.10 | -1.49 |
| Model Predicting Trauma Symptoms (with Negative Coping and FVE/CVE Composites) | | | | |
| CVE Composite | .12 | .04 | .21 | 2.98* |
| FVE Composite | -.16 | .46 | -.02 | -.35 |
| Negative Coping | 13.17 | 2.59 | .36 | 5.09** |
| Age | -.73 | .38 | -.13 | -1.93 |

Note. CVE = Community Violence Exposure; FVE = Family Violence Exposure.

* $p < .01$;

** $p < .001$