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ARTICLE

Community violence and posttraumatic stress disorder symptoms in urban youth: The moderating influence of friend and parent support

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Abstract

Separate lines of research have demonstrated that community violence predicts posttraumatic stress disorder (PTSD) symptoms in youth and that social support is one protective factor against the development of PTSD symptoms. The current study sought to examine the associations between primary and secondary exposure to community violence and the moderating role of parent and friend support on these relations. Participants were 96 urban youths (aged 6–17 years; 58.4% racial/ethnic minority; 51% female) and a caregiver recruited from a university mental health clinic. Results indicated that both primary and secondary exposure to community violence predicted PTSD symptoms. Friend support, but not parent support, moderated the association between primary, but not secondary, exposure to community violence and PTSD symptoms. The findings suggest that friend support is a salient protective factor for urban youth who may be at risk of PTSD symptoms due to exposure to community violence.

1 | INTRODUCTION

Community violence is a major public health concern that negatively affects children's development (Krug, Mercy, Dahlberg, & Zwi, 2002). Youth in the United States experience much higher rates of community violence when compared to other industrialized nations (Boney-McCoy & Finkelhor, 1995). Although exposure to violence extends beyond urban areas, children in impoverished, crime-ridden urban communities are particularly affected. Indeed, among children living in low-income, urban areas, nearly 70% report being the victim of community violence or report witnessing it (Fitzpatrick & Boldizar, 1993). Ethnic minority children are disproportionately affected by community violence (Selner-O'Hagan, Kindlon, Buka, Raudenbush, & Earls, 1998). Ethnic minority children, who reside in urban areas, experience higher rates of community violence when compared to Caucasian children (Stein, Jaycox, Kataoka, Rhodes, & Vestal, 2003). The same is true of children living in urban poverty (Youngstrom, Weist, & Albus, 2003).

Research has indicated that youth who experience community violence are at increased risk for anxiety, depression, disruptive behaviors, aggression, and substance use (Cooley-Quille, Boyd, Frantz, & Walsh, 2001; Gorman-Smith

& Tolan, 1998; Jenkins & Bell, 1994; Lorion & Saltzman, 1993; Osofsky, Wewers, Hann, & Fick, 1993; Pynoos et al., 1987; Schwab-Stone et al., 1999; Singer, Anglin, Song, & Lunghofer, 1995). Additionally, youth exposed to community violence are more likely to experience posttraumatic stress disorder, academic failure, and juvenile delinquency (Richters & Martinez, 1993; Schwartz & Gorman, 2003). Despite this literature, there is a dearth of studies distinguishing the types of community violence, using samples of youth living in urban areas, and examining the protective nature of social support in such samples.

1.1 | PTSD symptoms and types of community violence

As noted above, community violence has strong effects on posttraumatic stress disorder (PTSD) symptoms in children. Importantly, the focus of this introduction will be on PTSD symptoms, rather than the disorder itself. Research on symptoms may not require children to meet criteria for the disorder, and therefore, may not apply to disordered children in all cases. Although many factors (e.g., previous traumatic exposure; Berkowitz, Stover, & Marans, 2011) have been implicated in the development of PTSD symptoms in youth, a meta-analysis of 114 studies found that community violence had its strongest effects on PTSD symptoms, when compared with other internalizing and externalizing disorders (Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009).

There are, however, two types of community violence that may demonstrate different effects on PTSD symptoms (see CDC Youth Risk Behavior Surveillance Survey, 2012). These are categorized by the level of exposure to violence. For the purposes of this study, we refer to these categories as primary and secondary exposure to community violence. Primary exposure is when violence is directly experienced or witnessed by the youth. Secondary exposure is when the violence is experienced through the report of another source (e.g., heard about it from friends).

Both primary and secondary exposure to community violence have been linked with PTSD symptoms in youth (Fowler et al., 2009; Gibson, Morris, & Beaver, 2009; Lynch & Cicchetti, 1998). Research pertaining to each primary and secondary exposure to community violence will be reviewed separately below. Evidence from both cross-sectional and longitudinal studies has shown that children who are directly exposed to greater rates of community violence are at greater risk of developing PTSD symptoms (Fowler et al., 2009). This may be because direct exposure to community violence increases isolation (Margolin & Gordis, 2000) or decreases interest in activities and school (Cooley-Quille et al., 2001) for fear of repeated victimization.

Another reason direct exposure to violence is linked to PTSD is because exposure to chronic community violence leads to ongoing hyperarousal. In communities that are besieged by pervasive violence, children experience this ongoing hyperarousal with an associated sense of insecurity. Children in these communities may feel there is no end to the violence, comparable to combat zones (Horowitz, McKay, & Marshall, 2005), which causes lasting hyperarousal (Schell, Marshall, & Jaycox, 2004; Wilson, Kliewer, Teasley, Plybon, & Sica, 2002). Indeed, parents residing in violent communities or those who have been victimized by community violence have children who report feeling more unsafe and are at increased risk of developing PTSD symptoms (Linares & Cloitre, 2004; Yehuda, Halligan, & Grossman, 2001). Children's chronic feeling of being at risk for victimization may be the reason that primary exposure to community violence is such a particularly salient predictor of PTSD symptoms (Fowler et al., 2009).

In addition to the links between primary exposure and PTSD symptoms, secondary exposure to community violence (e.g., hearing about it from a friend; Lambert, Nylund-Gibson, Copeland-Linder, & Ialongo, 2010) also increases PTSD symptoms. Although the research distinguishing between primary and secondary exposure is relatively sparse, results for secondary exposure to violence mirror those for primary exposure to violence. For example, a meta-analysis of 114 studies demonstrated that proximity to violence did not differently affect PTSD symptoms (Fowler et al., 2009). That is, the effects of community violence on PTSD symptoms in children held regardless of whether the child was a victim, witnessed, or heard about community violence.

Similar to those children who directly experience community violence, children who are affected through the reports of others likely experience an increased fear that violence is pervasive in their community. This fear for one's safety causes youths to remain vigilant and hyperaroused to their surroundings, possibly leading to and perpetuating PTSD symptoms (Schell et al., 2004). Importantly, secondary exposure to community violence has shown to predict for

PTSD symptoms across domains (e.g., avoidance, reexperiencing, and negative thoughts or feelings), not only hyperarousal symptoms (Fowler et al., 2009).

In urban areas, secondary exposure to violence may be a common occurrence. Studies have shown that over two thirds of children in urban poverty report hearing about violence from friends and family (McDonald & Richmond, 2008). In these communities youths may experience "collective traumatization," similar to those individuals who have experienced acts of terrorism (Garfin, Holman, & Silver, 2015; Rimé, Páez, Basabe, & Martínez, 2010), because of a belief that the community is unable to protect them from violence and their safety is continually at risk (Horowitz, Weine, & Jekel, 1995). As such, both primary and secondary exposures to community violence increase risk for PTSD symptoms.

There are additional factors that may increase risk for PTSD symptoms in children exposed to community violence. For example, previous trauma exposure, the social environment of the child, and biological characteristics have all been implicated as possible factors in the development of PTSD symptoms after exposure to community violence (see Lynch, 2003, for a review). Yet protective factors exist that may buffer the risk of PTSD symptoms after exposure to community violence.

1.2 | Social support

One such protective factor is social support. Social support is defined as a social network's ability to provide resources intended to benefit an individual's ability to cope with stress (Cohen, 2004) and is theorized to influence children's well-being across a number of contexts (Kliewer, Lepore, Oskin, & Johnson, 1998). There are a number of forms of social support (e.g., structural support, functional support, and emotional support). However, for the purposes of this study, we will use social support to refer to a broad category under which these forms of support fall. Similarly, social support can be provided by a number of different systems (e.g., partner, family, friends, community, national systems; Sippel, Pietrzak, Charney, Mayes, & Southwick, 2015). The current study focuses on two systems particularly salient for children: parent- and friend-provided social support. Additionally, we make a distinction between support provided by friends and support provided by other peers (e.g., classmates). Although peer and friend support are typically used interchangeably, research has demonstrated that children do distinguish between support provided by peers and support provided by friends (Malecki & Demaray, 2002).

Despite the multitude of studies linking exposure to community violence with an increased risk for PTSD, some youth exposed to community violence develop effective coping skills (Fitzpatrick & Boldizar, 1993). More specifically, Sippel et al. (2015) state that social networks need to be understood to fully understand resilience in the face of trauma. Empirical studies have begun to confirm this. In meta-analyses, perceived social support is one of the strongest correlates of PTSD symptoms across ages (Brewin, Andrews, & Valentine, 2000). Specific to children, greater parent and friend support was found to be a protective factor against PTSD symptoms in child abuse survivors (Wilson & Scarpa, 2014). In Kuwaiti children exposed to the Gulf War, social support was found to moderate the association between exposure to war zones and traumatic symptoms, such that those children with greater social support reported the lowest levels of PTSD symptoms (Llabre & Hadi, 1997). Similar findings were reported in a sample of children in the child welfare system that experienced childhood abuse (Salazar, Keller, & Courtney, 2011).

Additionally, research has focused on the effect of social support on community violence and psychopathology in urban youths. For example, social support factors moderated the effect of community violence exposure on depression and anxiety symptoms in a sample of inner city African American adolescents (Hammack, Richards, Luo, Edlynn, & Roy, 2004). In a longitudinal study of urban children exposed to community violence, researchers found that familial social support did not moderate the association between community violence exposure and anxiety (White, Bruce, Farrell, & Kliewer, 1998).

In a separate sample of urban youths exposed to community violence, friend support was found to predict for lower anxiety (Hill, Levermore, Twaite, & Jones, 1996). The authors state that interventions should attempt to maximize aspects of friend support in children exposed to community violence to reduce anxiety symptoms. Yet parental support, and not friend support, was found to predict for decreased problem behaviors in a sample of urban adolescents

(O'Donnell, Schwab-Stone, & Muyeed, 2002). It is possible this finding was due to the measure of friend support. Only a single item, denoting how often a child talks about problems with a friend, was used to determine friend support. Evidence appears to be mixed for the effect of friend and parental support on the relation between community violence and psychopathology in urban youths. Importantly, none of the above studies focused specifically on PTSD symptoms in these children. Additionally, these studies used community samples. Using samples of children seeking mental health services may provide important implications for intervening with children in distress.

1.3 | Current study

The current study is aimed at addressing important gaps in the literature. Specifically, the study aims to examine the associations between primary and secondary forms of community violence and PTSD symptoms in youth. The current study will examine the moderating role of social support, specifically parent and friend social support, on the association between exposure to community violence and PTSD symptoms. These aims will be examined using a sample of urban youths presenting to a mental health treatment facility. Based on the extant literature, we hypothesized that both primary and secondary exposure to community violence would predict for increased PTSD symptoms. Although research is mixed as to the effect of parent and friend support on this relation (e.g., Hill et al., 1996; White et al., 1998), we hypothesized that both parent and friend support would moderate the association between exposure to community violence and PTSD symptoms. This moderation would hold across both primary and secondary exposure to community violence. We hypothesized this based on the theory that children's well-being suffers for children with low levels of social support across domains (Kliewer et al., 1998).

2 | METHOD

2.1 | Participants and procedures

Participants were 96 youths and one parent or guardian recruited from a university mental health clinic specializing in pediatric anxiety and stress disorders. The clinic serves an urban area in Chicago. The sample for the current study was drawn from a larger study examining risk and protective factors for anxiety disorders in urban youth. Youth were between 6 and 17 years of age (mean [*M*] = 12.5, standard deviation [*SD*] = 3.2), with the sample consisting of approximately 12.5% 6 to 8 year olds, 25% 9 to 11 year olds, 29.3% 12 to 14 year olds, and 33.3% 15 to 17 year olds. The sample was diverse across ethnicities with 41.1% Caucasian, 34.4% Hispanic, 14.6% African American, 6.3% biracial or other, and 3.1% Asian. There was an approximately even split between male and female children (49% male). Parents were mostly biological parents (81.3% mothers; 15.6% biological father), though 1 adopted father, 1 stepmother, and 1 parent who did not report a relationship also participated, and were married (54.2%; 13.5% single). The majority of families (55.7%) had an annual household income greater than $50,000; however, 28.6% of families reported receiving some public assistance. Additionally, 25% of families resided in census tracts where the percentage of families below the poverty rate was greater than 20%. Most parents reported working full- or part-time (71.3%).

Families who presented to the outpatient, university-based clinic for child anxiety and stress disorders were invited to participate in a research study after their initial appointment. At the initial appointment, parents and children were explained the nature of the study and parent consent and child assent was collected at this time. Caregivers and their children were asked to complete intake questionnaires describing demographic information, psychological symptoms, perceived support, and exposure to community violence. The sample consists of those families who agreed to participate and who provided the measures used in the current study. As noted above, the current investigation was part of a larger study and not all participants of the larger study completed the current set of measures. Participants who did not complete the current measures were missing at random or the measure was added to the study after their participation. The study was approved by the university's institutional review board.

2.2 | Measures

2.2.1 | Community violence exposure

The Children's Report of Exposure to Violence (CREV; Cooley, Turner, & Beidel, 1995) was used to assess youths' lifetime primary and secondary exposure to community violence. The CREV is a widely used measure of community violence and has shown to be appropriate for all genders and in ethnically diverse samples (Javdani, Abdul-Adil, Suarez, Nichols, & Farmer, 2014; Purugganan, Stein, Silver, & Benenson, 2000). It has demonstrated good test-retest reliability, construct validity, and internal consistency in other samples. Both the parent and child separately completed the CREV and both versions comprise 29 items. To reduce the effect of single reporter bias, parent and child community violence reports were composited. Although the CREV includes six subscale scores (e.g., witnessing violence against a stranger), the current study created two variables from these subscales to match our differentiation between secondary and primary exposure to community violence.

Secondary exposure consisted of a mean of the items making up the hearing reports of stranger victimization and hearing reports of family victimization subscales. Primary exposure consisted of a mean of the items making up the witnessing a stranger victimization, witnessing a family member victimization, and direct experience. The two variables share no overlapping items. The secondary exposure to violence factor consists of 10 items and refers to violence that is heard about involving either a stranger or a familiar person. The primary exposure to violence factor comprises 14 items and refers to violence that is directly experienced or witnessed involving either a stranger or familiar person (Cooley et al., 1995).

Children and parents are asked to denote how often a child has been exposed to a violent act (e.g., "Have you ever seen a stranger being beaten up?") on a 5-point likert scale ranging from 0 (*never*) to 4 (*everyday*). The types of violence inquired about include being chased, threatened with bodily harm, robbed or mugged, shot and stabbed. Scores range between 0 and 4, with higher the scores on either factor reflecting a greater frequency of exposure. In the current study, both the parent and the child reported displayed high internal consistency ($\alpha = 0.91$ and $\alpha = 0.94$ respectively). Specific subscales are as follows: parent report secondary was $\alpha = 0.86$, parent report primary was $\alpha = 0.89$, child report secondary was $\alpha = 0.87$, child report primary was $\alpha = 0.93$.

2.2.2 | Social support

Perceived social support was measured using the Child and Adolescent Social Support Scale (CASSS; Malecki, Demaray, & Elliott, 2004). The CASSS is a 40-item self-report scale that measures social support from four sources: parents, teachers, classmates, and friends. Importantly, the CASSS makes a distinction between friends and other peers (e.g., classmates). It includes both frequency and importance information, though the importance information is primarily used for clinical interpretation (Malecki & Demaray, 2002). As such, only frequency ratings are used in the current study. The CASSS has shown to be a valid and reliable measure of social support in children from ages 7 to 17 years (Malecki & Demaray, 2002). It has also shown high levels of internal consistency in previous studies, with all domains demonstrating Cronbach's alpha greater than .96 (Demaray & Malecki, 2002; Malecki et al., 2004). Test-retest reliability, over 8 to 10 weeks, was also demonstrated to be high in these studies.

For the purposes of the current study, only the frequency ratings for the parent and friend subscales were used. Each subscale consists of 12 questions regarding that domain of social support and yields scores between 12 and 72. Children respond to statements (e.g., "My parent(s) help me make decisions") using a 6-point likert scale ranging from 1 (*never*) to 6 (*always*), where higher scores represent greater perceived social support from that domain. In the current sample the internal consistency for the parent subscale was $\alpha = 0.92$ and for the friend subscale was $\alpha = 0.75$.

2.2.3 | PTSD symptoms

The Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) was used to assess PTSD symptoms in children. The CBCL is a widely used parent report behavior rating scale for children between 4 and 18 years of age

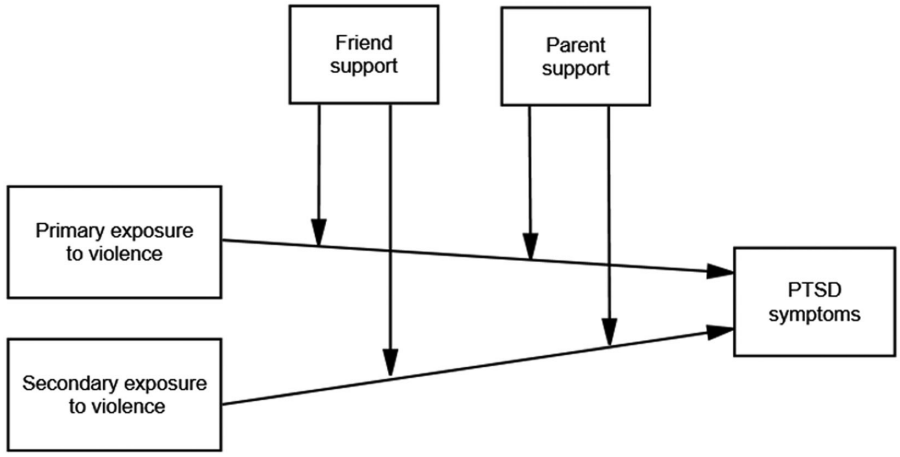

FIGURE 1 Path analysis model of the modeerating role of friend and parent support on the relation between primary and secondary exposure to violence and PTSD symptoms
Note. Analysis controls for age and gender. Single arrow lines represent regression paths. PTSD = Posttraumatic stress disorder.
$^{*}p < .05$, $^{**}p < .01$

(Achenbach, 1991). The CBCL comprises 118 items that asked parents to denote how true a statement is on a 3-point likert scale ranging from 0 (*no true*) to 2 (*often true*). It has demonstrated excellent internal consistency, construct validity, and test-retest reliability across ages, genders, and ethnicities (Achenbach & Rescorla, 2001). It is also able to distinguish between disordered and nondisordered peers (Edelbrock & Achenbach, 1980).

The current study utilized the 14-item PTSD subscale. Examples of items making up the PTSD subscale are: "nervous, high strung, or tense," "nightmares," and "sudden changes in mood or feelings." In previous studies, the PTSD subscale has shown adequate reliability and internal consistency (Milot et al., 2013; Ruggiero & McLeer, 2000). However, there is research that suggests the subscale may be limited in its ability to accurately predict those with PTSD diagnoses (Loeb, Stettler, Gavila, Stein, & Chinitz, 2011) and many of its items map on to anxiety or general distress. All raw scores were converted to standardized T scores. T scores are standardized using a computer program that accounts for the child's age and gender, where higher scores indicate greater severity of posttraumatic stress symptoms. T scores were used in all analyses. In the current sample, the internal consistency for the PTSD subscale was $\alpha = 0.86$.

2.3 | Statistical analyses

We used SPSS (version 21) to analyze all data and AMOS (version 21) to conduct path analysis. AMOS uses maximum likelihood to estimate parameters that best fit the data. Path analysis was used to examine study hypotheses. In order to calculate moderation, the significance of the conditional effect was tested at values of the moderator. The conditional effect is the change in the effect of an independent variable on a dependent variable that occurs at different levels of the moderator. Figure 1 presents a path model of the moderation. All study variables were standardized and the products between exposure to community violence (e.g., primary and secondary exposure to violence) and social support (e.g., parent and friend support) variables were used as the interaction terms.

The current study utilized a bootstrapping approach to the moderation analyses (n = 5000 bootstrap samples; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Bootstrapping provides standard error estimates for parameters and bias-corrected confidence intervals for effects. Confidence intervals reported in the current study are 95% bias-corrected confidence intervals. Bootstrapping is effective in assessing moderation in small samples and has been shown to overcome the need for larger samples sizes in other analytical approaches (Efron & Tibshirani, 1986; Karazsia, Berlin, Armstrong, Janicke, & Darling, 2014).

TABLE 1 Descriptive statistics and second-order partial Pearson correlations

	1	2	3	4	5
1. Community violence-primary (CREV)	–	.48**	.21*	–.08	.24*
2. Community violence-secondary (CREV)		–	.24*	–.07	.26*
3. Friend support (CASSS)			–	.16	–.08
4. Parent support (CASSS)				–	.04
5. PTSD symptoms (CBCL)					–
Mean	0.31	0.92	58.59	54.63	65.33
SD	0.37	0.70	11.34	11.64	8.47
Range	0 – 1.38	0 – 2.40	28 – 73	23 – 72	50 – 89

Note. All correlations control for age and gender. PTSD symptom scores are T scores. CREV = Children's Report of Exposure to Violence; CASSS = Child and Adolescent Social Support Scale; PTSD = Posttraumatic Stress Disorder; CBCL = Child Behavior Checklist.
*$p < .05$. **$p < .01$.

3 | RESULTS

3.1 | Descriptive statistics and correlations

Descriptive statistics and second-order partial Pearson correlation coefficients appear in Table 1. All variables were approximately normally distributed. Prior to examining study variables, age and gender were analyzed for their correlation with any study variable. Age was found to be positively and significantly correlated with both primary and secondary exposure to violence ($r = .31$, $p = .002$; $r = .48$, $p < .001$ respectively). Gender was found to be negatively and significantly correlated with friend support ($r = .21$, $p = .04$). That is, males reported significantly lower levels of friend support. Given these significant associations, age and gender were controlled for throughout our analyses and all correlation coefficients reported are second-order partial coefficients.

Additionally, study variables were examined across ethnicity. Due to small sample sizes for certain ethnic groups, we examined if differences existed in study variables between Caucasian and ethnic minorities, which included Asian, African American, Latino, and other participants. Primary exposure to community violence was shown to differ between these two groups $F(1,94) = 8.04$, $p = .006$. However, no other variables were found to differ by ethnic group. To further understand this difference, we analyzed primary exposure to violence by ethnic group for all ethnic groups, which yielded a significant difference $F(4,91) = 3.16$, $p = .02$. Using Scheffe post-hoc tests, mean primary exposure to violence levels were significantly different between the Caucasian ($M = 0.18$, $SD = 0.25$) and Latino ($M = 0.45$, $SD = 0.46$), $p = .046$, ethnic groups.

Pearson correlation coefficients were calculated between primary exposure to violence, secondary exposure to violence, friend support, parent support, and PTSD symptoms. As expected, both primary and secondary exposures to violence were positively and significantly correlated with PTSD symptoms ($r = .24$, $p = .02$; $r = .26$, $p = .01$ respectively). Additionally, friend support was significantly and positively associated with primary exposure to violence ($r = .21$, $p = .04$) and secondary exposure to violence ($r = .24$, $p = .02$). Neither primary nor secondary exposure to violence was significantly correlated with parent support. Similarly, neither parent nor friend support was significantly correlated with PTSD symptoms. Variance inflation factor (VIF) indicated that multicollinearity was not of concern as scored were below accepted norms (10; Grimm & Yarnold, 1995). VIF scores were lower than 1.9 for all study variables including interaction terms.

3.2 | Path analysis and hypothesis testing

Figure 1 displays the path analysis model. Correlations were added between all exogenous variables (i.e., independent variables that effect the model without being predicted by another variable) to appropriately constrain the model. In

TABLE 2 Summary of path analysis

	β	SE	95% CI	p
Covariates				
Child age	−0.13	.11	[−0.34, 0.11]	.27
Child gender	−0.12	.12	[−0.33, 0.12]	.36
Main effects				
Primary exposure	0.29*	.12	[0.04, 0.52]	.03
Secondary exposure	0.35*	.13	[0.09, 0.59]	.01
Friend support	−0.22	.11	[−0.16, 0.03]	.10
Parent support	0.06	.12	[−0.42, 0.31]	.55
Interaction effects				
Primary exposure x friend support	−0.37*	.12	[−0.60, −0.13]	.01
Primary exposure x parent support	0.04	.16	[−0.31, 0.32]	.86
Secondary exposure x friend support	0.01	.14	[−0.21, 0.32]	.68
Secondary exposure x parent support	−0.02	.16	[−0.35, 0.29]	.91

Note. SE = standard error; CI = confidence interval.
*Significant point estimate ($p < .05$).

the current model, exogenous variables are follows: age, gender, primary exposure to violence, secondary exposure to violence, parent support, friend support, and all interactions terms. Although path analysis allows for the assessment of model fit, the current model was fully saturated, prohibiting analysis of the fit of the model to the data. That is, no degrees of freedom are available to allow for calculation of the model fit for the complete model. Given this, no comment on the fit of the model to the data can be made. However, study hypotheses regarding the effects of variables within the model are still able to be appropriately tested and interpreted in saturated models (Gefen, Straub, & Boudreau, 2000). Consistent with our study hypotheses, only specific paths within the model will be analyzed and reported.

Table 2 displays results of all paths from the path model. Child age and gender were covaried in all analyses. As expected, primary exposure to violence $\beta = 0.29$, $p = .03$, 95% CI [0.04, 0.52] and secondary exposure to violence $\beta = 0.35$, $p = .01$, 95% CI [0.09, 0.59] significantly predicted increased PTSD symptoms. Neither friend support ($p = .10$) nor parent support ($p = .55$) predicted PTSD symptoms. Similarly, interactions between primary exposure to violence and parent support ($p = .86$), secondary exposure and friend support ($p = .68$), and secondary exposure and parent support ($p = .91$) did not significantly predict PTSD symptoms. However, consistent with our hypotheses the interaction between primary exposure to violence and friend support did significantly predict PTSD symptoms $\beta = -0.37$, $p = .01$, 95% CI [−0.60, 0.13].

Simple slopes analysis (i.e., conditional effects) was conducted to understand the characteristics of this interaction. To do this, the "pick a point" method (Preacher, Curran, & Bauer, 2006) was used. The conditional effect of primary exposure to violence on PTSD symptoms was obtained for values of friend support equal to the sample mean as well as one standard deviation above and below the mean. Figure 2 displays the results of the simple slopes analysis. The conditional effect for friend support one standard deviation below the mean was 5.98, $p < .001$, 95% CI [2.90, 9.06], the conditional effect for mean level friend support was 3.32, $p < .001$, 95% CI [1.43, 5.22], and the conditional effect for friend support one standard deviation above the mean was 0.67, $p = .55$, 95% CI [−1.51, 2.84].

4 | DISCUSSION

The purpose of the current study was to examine the effects of primary exposure to violence, secondary exposure to violence, friend support, and parent support on PTSD symptoms in a sample of urban youth. Specifically, we

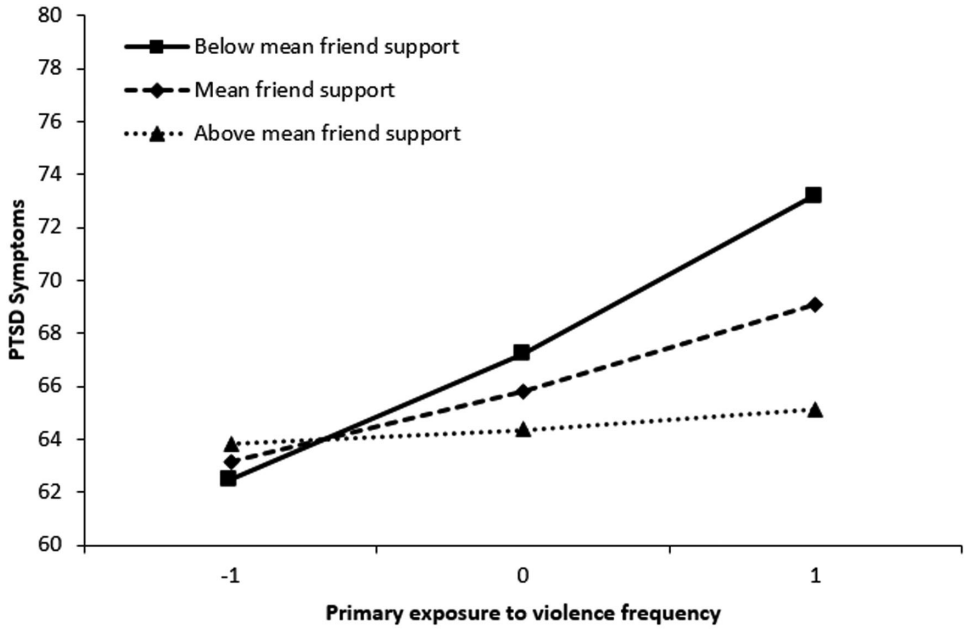

FIGURE 2 Moderating effect of friend support on the effect of primary exposure ot violence on PTSD symptoms
Note. The below mean friend support line represents a score 1 statndard deviation below the mean and the above mean friend support represents a score 1 standard deviation above the mean. The primary exposure to violence frequency axis is in standard deviations, where 0 represents the mean.
PTSD = Posttraumatic stress disorder

investigated the moderating role of friend support and parent support on the relation between primary and secondary exposure to violence and PTSD symptoms within a single path model. Based on extant literature (e.g., Fowler et al., 2009; Kliewer et al., 1998), we hypothesized that both primary and secondary exposure to community violence would predict PTSD symptoms. We also hypothesized that friend and parent support, separately, would moderate the association between primary and secondary exposure to community violence and PTSD symptoms. Results partially supported these hypotheses.

Although a test of model fit could not be performed, our model explained approximately 23% of the variance in PTSD symptoms ($R^2 = .23$). This is similar in magnitude to other models of community violence and PTSD symptoms (Jaycox et al., 2002). It also suggests that while exposure to community violence and social support are important predictors of increased PTSD symptoms, other factors (e.g., emotion regulation; Cloitre, Miranda, Stovall-McClough, & Han, 2005) likely play a role as well.

Differences in primary exposure to community violence by ethnicity were also observed. Although sample sizes precluded us from testing effects within our path model by ethnic group, mean differences by ethnic group were examined. A significant difference in primary exposure to community violence was observed between Caucasian and Latino ethnic groups, with Latino participants endorsing higher levels of primary exposure to community violence.

Importantly, small sample sizes suggest these results be interpreted with caution; however, these findings are consistent with previous work examining community violence in ethnic minorities. For example, in a large review of the literature, Stein et al. (2003) found that ethnic minority status was significantly related to exposure to community violence. There is some research that this may differ across different types of traumatic events (Roberts, Gilman, Breslau, Breslau, & Koenen, 2011). Further studies will be required to understand the associations among exposure to community violence, friend and parent support, and PTSD symptoms among different ethnic minority groups and to what effect factors such as historical trauma may have on these relations.

4.1 | The effect of community violence on PTSD symptoms

Results supported the hypothesis that both primary and secondary exposure to violence would predict greater PTSD symptoms. This is consistent with a large body of research (see Fowler et al., 2009, for a meta-analysis) on the detrimental effects of community violence. Children with greater primary exposure to community violence are more likely to experience traumatic events and subsequent PTSD symptoms (Rosenthal, 2000). This may be due to a number of factors (e.g., the social environment of the child; Lynch, 2003). However, in communities where violence is pervasive, children who have experienced primary exposure to violence may feel at risk of being victimized again. This is the basis for the concept of continuous traumatic stress (CTS; Eagle & Kaminer, 2013). CTS focuses on present and future violence exposure and thus causes significant anticipatory anxiety. This may lead to avoidance of certain neighborhood areas and cause children to feel hypervigilant for threats and chronically hyperaroused. Although these reactions emerge from real threats that require ongoing vigilance, they can lead to chronic hyperarousal, which increases the risk of developing PTSD and severe PTSD symptoms in these youths (Kendall-Tackett, 2000; Klodnick, Guterman, Haj-Yahia, & Leshem, 2014; Thompson & Massat, 2005). Importantly, primary exposure to community violence may affect PTSD symptoms through other pathways, such as increased likelihood for traumatization (Margolin, Vickerman, Oliver, & Gordis, 2010).

Children with greater secondary exposure to community violence also tended to have greater PTSD symptoms. This is similar to findings in the meta-analysis by Fowler et al. (2009), which found that effects of community violence occurred regardless of whether violence was experienced, witnessed, or heard about. Children exposed to community violence, regardless of primary or secondary exposure, are likely to see their environment as unsafe (Margolin & Gordis, 2000). This may explain why hearing about community violence has similar effects to directly experiencing it. That is, children who hear about community violence still develop a sense that their community is unsafe and cannot protect them from harm (Schell et al., 2004). The same mechanisms (e.g., increased hyperarousal, avoidance, decreased activity, and reexperiencing) increase the likelihood of PTSD symptoms in children regardless of if they hear about it, witness it, or experience it directly. Hyperarousal may also explain why children exposed to community violence have increased risk for health outcomes such as heart disease, cancer, stroke, and diabetes (Felitti et al., 1998).

4.2 | The moderating role of parent and friend support

Our hypothesis–that the relation between primary and secondary exposure to violence and PTSD symptoms would be moderated by parent and friend support–was partially supported. That is, friend support significantly moderated the association between primary exposure to violence and PTSD symptoms. Children with higher levels of friend support experienced significantly lower PTSD symptoms when compared to children with lower levels of friend support. Parent support did not moderate the association between primary exposure to violence and PTSD symptoms, and neither parent nor friend support moderated the association between secondary exposure to violence and PTSD symptoms.

Although previous research has been mixed as to the effect of parent versus friend support on children's well-being, the finding that friend support moderated the effect of community violence is consistent with some studies (Berman, Kurtines, Silverman, & Serafini, 1996; Hill et al., 1996). There are several possible reasons why friend support may be particularly important for urban children exposed to community violence. First, as children age friend support becomes more important compared to family and parent support (Runtz & Schallow, 1997). This may be because as children grow older, they share more experiences with friends, leading to comfort and camaraderie even in the face of community violence. Indeed, parents have been shown to greatly underestimate levels of community violence children are exposed to (Ceballo, Dahl, Aretakis, & Ramirez, 2001). Second, children who are supported by their friends may be able to access support across domains (e.g., school, after school, in the neighborhood, at home), whereas parent support may feel more limited to time at home.

Third, community violence may have a stressful effect on parents, as well as children, and reduce parents' ability to provide adequate levels of support. For these children, parents may be a source of additional stress rather than support. Indeed, research has demonstrated that parental PTSD symptoms are associated with impaired parenting and

subsequent children's psychological distress, including anxiety, depression, and behavior problems (Lambert, Holzer, & Hasburn, 2014). Fourth, for some children, violence may occur within the home or family unit, which may not only reduce support from parents, but also affect how the child perceives support from adults (Powers, Ressler, & Bradley, 2009). Last, the effect of parent support may be nuanced. Parent support may be essential for other types of youth distress (e.g., depression; Stice, Ragan, & Randall, 2004).

Additionally, Folger and Wright (2013) found that parent support moderated the effects of child abuse at lower levels of severity of abuse. Similar findings were reported regarding levels of well-being among children exposed to community violence (Ceballo, Ramirez, Hearn, & Maltese, 2003). The authors state that parent support may be more important for children at lower levels of distress. This is consistent with a large body of research finding that certain protective factors will be protective but reactive (i.e., protective at low levels of stress but not at high levels of stress; Luthar, Cicchetti, & Becker, 2000). As the current sample was one of treatment seeking youths, our sample may have exhibited more severe distress, making parent support less likely to moderate the associations. This may also explain previous mixed findings in the literature regarding parent and friend support.

In sum, the current study has found evidence for the main effects of primary and secondary exposure to violence and the moderating effect of friend-provided social support. However, only the effect of primary exposure to violence was moderated by friend support. This suggests that the type of exposure to community violence and the person providing the social support influences PTSD symptoms in urban youth. It is also possible that parent support is a protective-reactive effect and has a protective effect on children at low levels of stress but not at higher levels of stress (Cleveland, Feinberg, & Greenberg, 2010; Luthar et al., 2000). However, the support of friends may be particularly positive in reducing PTSD symptoms in youth who experience or witness community violence.

4.3 | Limitations

The current study was subject to certain limitations. One limitation is the cross-sectional design of the study. Although cross-sectional data provide important preliminary information on the nature of certain associations, they cannot make any conclusions about causality. Whereas cross-sectional data do allow for a glimpse of the predicted associations specified in the hypothetical model, such associations can differ over time. Further, a developmental analysis may yield unique findings and represents an important area for further inquiry. The use of parent and child reports for different variables can lead to method effects and/or reporter bias, which may bias results. However, the use of a composite score derived from parent and child reports for the exposure to community violence measure may reduce bias from any one reporter. As noted in the methods section, research on the PTSD subscale of the CBCL has shown mixed results as to whether it is a valid screening tool for PTSD (e.g., Loeb et al., 2011). As such, the results of the current study should be interpreted with caution. Further research is needed to determine whether the PTSD subscale can be an appropriate screener for PTSD.

The nature of the current sample also limits the generalizability of the results. Sample sizes for different ethnic groups were uneven and, in some cases, small, making comparisons across ethnic groups difficult. Results may differ among certain subgroups (e.g., African American) when examined with sufficient samples across ethnicities. Although age was controlled for, children represented a wide range of ages. Differences likely exist among relations across this age group and further studies will be required to understand these associations across child and adolescent development. Additionally, the sample comprised treatment seeking youth and their parents presenting to an outpatient clinic. There may be specific patterns among treatment seeking youth (e.g., caregivers may be limited in their own ability to manage stress; Appleyard & Osofsky, 2003; Kiser & Black, 2005) that would differ in community samples. Future studies should determine if the same pattern of relations hold across community samples.

4.4 | Conclusion

Despite limitations, the current study demonstrated the unique effects of primary and secondary exposure to violence on PTSD symptoms and the conditional effect of friend support in a sample of urban youths. The findings are

consistent with previous studies (e.g., Fowler et al., 2009; Hill et al., 1996). Additionally, it provides support for the theory that social support influences children's well-being and coping skills in the face of community violence (Armstrong, Birnie-Lefcovitch, & Ungar, 2005; Booth, Rubin, & Rose-Krasnor, 1998; Sippel et al., 2015). More specifically, it confirms that different areas of social support may provide different effects on children's PTSD symptoms. In the current study, friend support buffered the effect of community violence on PTSD symptoms in urban youth (Brewin et al., 2000). It is possible that other areas of support (e.g., parent support) may provide protection against other psychopathology (e.g., depression; Stice et al., 2004) among treatment seeking youth. Further studies are needed to understand this.

Yet for children exposed to community violence, friend support may be particularly salient as a protective factor against PTSD symptoms. For clinicians, friend support may be an important target in the assessment and treatment of PTSD symptoms for youth who have been exposed to violence. It is possible that activating support from friends as part of treatment reduces symptoms of PTSD. Longitudinal studies are required to test this hypothesis. Those children who are directly exposed to violence, and are therefore more likely to experience PTSD symptoms, may be able to benefit most from positive friend support (Benhorin & McMahon, 2008).

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REFERENCES

Achenbach, T. M. (1991). *Child behavior checklist/4–18*. Burlington: University of Vermont.

Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms and profiles: An integrated system of multi-informant assessment*. Burlington, VT: Research Center for Children, Youth, and Families.

Appleyard, K., & Osofsky, J. D. (2003). Parenting after trauma: Supporting parents and caregivers in the treatment of children impacted by violence. *Infant Mental Health Journal*, *24*, 111–125.

Armstrong, M. I., Birnie-Lefcovitch, S., & Ungar, M. T. (2005). Pathways between social support, family well-being, quality of parenting, and child resilience: What we know. *Journal of Child and Family Studies*, *14*, 269–281.

Benhorin, S., & McMahon, S. D. (2008). Exposure to violence and aggression: Protective roles of social support among urban African American youth. *Journal of Community Psychology*, *36*, 723–743.

Berkowitz, S. J., Stover, C. S., & Marans, S. R. (2011). The child and family traumatic stress intervention: Secondary prevention for youth at risk of developing PTSD. *Journal of Child Psychology and Psychiatry*, *52*, 676–685.

Berman, S. L., Kurtines, W. M., Silverman, W. K., & Serafini, L. T. (1996). The impact of exposure to crime and violence on urban youth. *American Journal of Orthopsychiatry*, *66*, 329–336.

Boney-McCoy, S., & Finkelhor, D. (1995). Psychosocial sequelae of violent victimization in a national youth sample. *Journal of Consulting and Clinical Psychology*, *63*, 726–736.

Booth, C. L., Rubin, K. H., & Rose-Krasnor, L. (1998). Perceptions of emotional support from mother and friend in middle childhood: Links with social-emotional adaptation and preschool attachment security. *Child Development*, 427–442.

Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology*, *68*, 748–766.

Ceballo, R., Dahl, T. A., Aretakis, M. T., & Ramirez, C. (2001). Inner-City children's exposure to community violence: How much do parents know? *Journal of Marriage and Family*, *63*, 927–940.

Ceballo, R., Ramirez, C., Hearn, K. D., & Maltese, K. L. (2003). Community violence and children's psychological well-being: Does parental monitoring matter? *Journal of Clinical Child and Adolescent Psychology*, *32*, 586–592.

Centers for Disease Control and Prevention. (2012). Youth risk behavior surveillance—United States, 2011. *Morbidity and Mortality Weekly Report: Surveillance Summaries*, *61*, 1–162.

Cloitre, M., Miranda, R., Stovall-McClough, K. C., & Han, H. (2005). Beyond PTSD: Emotion regulation and interpersonal problems as predictors of functional impairment in survivors of childhood abuse. *Behavior Therapy*, *36*, 119–124.

Cohen, S. (2004). Social relationships and health. *American Psychologist*, *59*, 676–684.

Cooley, M. R., Turner, S. M., & Beidel, D. C. (1995). Assessing community violence: The children's report of exposure to violence. *Journal of American Academy of Child and Adolescent Psychiatry*, *34*, 201–208.

Cooley-Quille, M., Boyd, R. C., Frantz, E., & Walsh, J. (2001). Emotional and behavioral impact of exposure to community violence in inner-city adolescents. *Journal of Clinical Child Psychology*, *30*, 199–206.

Eagle, G., & Kaminer, D. (2013). Continuous traumatic stress: Expanding the lexicon of traumatic stress. *Peace and Conflict: Journal of Peace Psychology*, *19*, 85–99.

Edelbrock, C., & Achenbach, T. M. (1980). A typology of child behavior profile patterns: Distribution and correlates for disturbed children aged 6–16. *Journal of Abnormal Child Psychology*, *8*, 441–470.

Efron, B., & Tibshirani, R. (1986). Bootstrap methods for standard errors, confidence intervals, and other measures of statistical accuracy. *Statistical Science*, 54–75.

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., … & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, *14*, 245–258.

Fitzpatrick, K. M., & Boldizar, J. P. (1993). The prevalence and consequences of exposure to violence among African-American youth. *Journal of the American Academy of Child & Adolescent Psychiatry*, *32*, 424–430.

Folger, S. F., & Wright, M. O. D. (2013). Altering risk following child maltreatment: Family and friend support as protective factors. *Journal of Family Violence*, *28*, 325–337.

Fowler, P. J., Tompsett, C. J., Braciszewski, J. M., Jacques-Tiura, A. J., & Baltes, B. B. (2009). Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development and Psychopathology*, *21*, 227–259.

Garfin, D. R., Holman, E. A., & Silver, R. C. (2015). Cumulative exposure to prior collective trauma and acute stress responses to the Boston Marathon bombings. *Psychological Science*, *26*, 675–683.

Gefen, D., Straub, D., & Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, *4*(7)1–77.

Gibson, C. L., Morris, S. Z., & Beaver, K. M. (2009). Secondary exposure to violence during childhood and adolescence: Does neighborhood context matter? *Justice Quarterly*, *26*, 30–57.

Gorman-Smith, D., & Tolan, P. (1998). The role of exposure to community violence and developmental problems among inner-city youth. *Development and Psychopathology*, *10*, 101–116.

Grimm, L. G., & Yarnold, P. R. (1995). *Reading and understanding multivariate statistics*. Washington, DC: American Psychological Association.

Hammack, P. L., Richards, M. H., Luo, Z., Edlynn, E. S., & Roy, K. (2004). Social support factors as moderators of community violence exposure among inner-city African American young adolescents. *Journal of Clinical Child and Adolescent Psychology*, *33*, 450–462.

Hill, H. M., Levermore, M., Twaite, J., & Jones, L. P. (1996). Exposure to community violence and social support as predictors of anxiety and social and emotional behavior among African American children. *Journal of Child and Family Studies*, *5*, 399–414.

Horowitz, K., McKay, M., & Marshall, R. (2005). Community violence and urban families: Experiences, effects, and directions for intervention. *American Journal of Orthopsychiatry*, *75*, 356–368.

Horowitz, K., Weine, S., & Jekel, J. (1995). PTSD symptoms in urban adolescent girls: Compounded community trauma. *Journal of the American Academy of Child & Adolescent Psychiatry*, *34*, 1353–1361.

Javdani, S., Abdul-Adil, J., Suarez, L., Nichols, S. R., & Farmer, A. D. (2014). Gender differences in the effects of community violence on mental health outcomes in a sample of low-income youth receiving psychiatric care. *American Journal of Community Psychology*, *53*, 235–248.

Jaycox, L. H., Stein, B. D., Kataoka, S. H., Wong, M., Fink, A., Escudero, P., & Zaragoza, C. (2002). Violence exposure, posttraumatic stress disorder, and depressive symptoms among recent immigrant schoolchildren. *Journal of the American Academy of Child & Adolescent Psychiatry*, *41*, 1104–1110.

Jenkins, E. J., & Bell, C. C. (1994). Violence among inner city high school students and post-traumatic stress disorder. In S. Freidman (Ed.), *Anxiety disorders in African Americans* (pp. 76–88). New York: Springer.

Karazsia, B. T., Berlin, K. S., Armstrong, B., Janicke, D. M., & Darling, K. E. (2014). Integrating mediation and moderation to advance theory development and testing. *Journal of Pediatric Psychology*, *39*, 163–173.

Kendall-Tackett, K. A. (2000). Physiological correlates of childhood abuse: Chronic hyperarousal in PTSD, depression, and irritable bowel syndrome. *Child Abuse & Neglect*, *24*, 799–810.

Kiser, L. J., & Black, M. M. (2005). Family processes in the midst of urban poverty: What does the trauma literature tell us? *Aggression and Violent Behavior*, *10*, 715–750.

Kliewer, W., Lepore, S. J., Oskin, D., & Johnson, P. D. (1998). The role of social and cognitive processes in children's adjustment to community violence. *Journal of Consulting and Clinical Psychology*, *66*, 199–209.

Klodnick, V. V., Guterman, N., Haj-Yahia, M. M., & Leshem, B. (2014). Exploring adolescent community violence exposure and posttraumatic stress cross-culturally in Israel. *Journal of Community Psychology*, *42*, 47–60.

Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). The world report on violence and health. *The Lancet*, *360*, 1083–1088.

Lambert, J. E., Holzer, J., & Hasbun, A. (2014). Association between parents' PTSD severity and children's psychological distress: A meta-analysis. *Journal of Traumatic Stress*, *27*, 9–17.

Lambert, S. F., Nylund-Gibson, K., Copeland-Linder, N., & Ialongo, N. S. (2010). Patterns of community violence exposure during adolescence. *American Journal of Community Psychology*, *46*, 289–302.

Linares, L. O., & Cloitre, M. (2004). Intergenerational links between mothers and children with PTSD spectrum illness. In R. R. Silva (Ed.), *Posttraumatic stress disorders in children and adolescents: Handbook* (pp. 177–201). New York: W. W. Norton & Co.

Llabre, M. M., & Hadi, F. (1997). Social support and psychological distress in Kuwaiti boys and girls exposed to the Gulf crisis. *Journal of Clinical Child Psychology*, *26*, 247–255.

Loeb, J., Stettler, E. M., Gavila, T., Stein, A., & Chinitz, S. (2011). The child behavior checklist PTSD scale: Screening for PTSD in young children with high exposure to trauma. *Journal of Traumatic Stress*, *24*, 430–434.

Lorion, R. P., & Saltzman, W. (1993). Children's exposure to community violence: Following a path from concern to research to action. *Psychiatry: Interpersonal and Biological Processes*, *56*, 55–65.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, *71*, 543–562.

Lynch, M. (2003). Consequences of children's exposure to community violence. *Clinical Child and Family Psychology Review*, *6*, 265–274.

Lynch, M., & Cicchetti, D. (1998). An ecological-transactional analysis of children and contexts: The longitudinal interplay among child maltreatment, community violence, and children's symptomatology. *Development and Psychopathology*, *10*, 235–257.

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, *7*, 83–104.

Malecki, C. K., & Demaray, M. K. (2002). Measuring perceived social support: Development of the child and adolescent social support scale (CASSS). *Psychology in the Schools*, *39*, 1–18.

Malecki, C. K., Demaray, M. K., & Elliott, S. E. (2004). *A working manual on the development of the Child and Adolescent Social Support Scale*. DeKaub: Northern Illinois University.

Margolin, G., & Gordis, E. B. (2000). The effects of family and community violence on children. *Annual Review of Psychology*, *51*, 445–479.

Margolin, G., Vickerman, K. A., Oliver, P. H., & Gordis, E. B. (2010). Violence exposure in multiple interpersonal domains: Cumulative and differential effects. *Journal of Adolescent Health*, *47*, 198–205.

McDonald, C. C., & Richmond, T. R. (2008). The relationship between community violence exposure and mental health symptoms in urban adolescents. *Journal of Psychiatric and Mental Health Nursing*, *15*, 833–849.

Milot, T., Plamondon, A., Éthier, L. S., Lemelin, J. P., St-Laurent, D., & Rousseau, M. (2013). Validity of CBCL-derived PTSD and dissociation scales: Further evidence in a sample of neglected children and adolescents. *Child Maltreatment*, *18*, 122–128.

O'Donnell, D. A., Schwab-Stone, M. E., & Muyeed, A. Z. (2002). Multidimensional resilience in urban children exposed to community violence. *Child Development*, *73*, 1265–1282.

Osofsky, J. D., Wewers, S., Hann, D. M., & Fick, A. C. (1993). Chronic community violence: What is happening to our children? *Psychiatry: Interpersonal and Biological Processes*, *56*, 36–45.

Powers, A., Ressler, K. J., & Bradley, R. G. (2009). The protective role of friendship on the effects of childhood abuse and depression. *Depression and Anxiety*, *26*, 46–53.

Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, *31*, 437–448.

Purugganan, O. H., Stein, R. E., Silver, E. J., & Benenson, B. S. (2000). *Exposure to violence among urban school-aged children: Is it only on television? Pediatrics*, *106*, 949–953.

Pynoos, R. S., Frederick, C., Nader, K., Arroyo, W., Steinberg, A., Eth, S., … Fairbanks, L. (1987). Life threat and posttraumatic stress in school-age children. *Archives of General Psychiatry*, *44*, 1057–1063.

Richters, J. E., & Martinez, P. (1993). The NIMH Community Violence Project: I. Children as victims of and witnesses to violence. *Psychiatry*, *56*, 7–21.

Rimé, B., Páez, D., Basabe, N., & Martínez, F. (2010). Social sharing of emotion, post-traumatic growth, and emotional climate: Follow-up of Spanish citizen's response to the collective trauma of March 11th terrorist attacks in Madrid. *European Journal of Social Psychology*, *40*, 1029–1045.

Roberts, A. L., Gilman, S. E., Breslau, J., Breslau, N., & Koenen, K. C. (2011). Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. *Psychological Medicine*, *41*, 71–83.

Rosenthal, B. S. (2000). Exposure to community violence in adolescents: Trauma symptoms. *Adolescence*, *35*, 271–284.

Ruggiero, K. J., & McLeer, S. V. (2000). PTSD scale of the Child Behavior Checklist: Concurrent and discriminant validity with non-clinic-referred sexually abused children. *Journal of Traumatic Stress*, *13*, 287–299.

Runtz, M. G., & Schallow, J. R. (1997). Social support and coping strategies as mediators of adult adjustment following childhood maltreatment. *Child Abuse & Neglect*, *21*, 211–226.

Salazar, A. M., Keller, T. E., & Courtney, M. E. (2011). Understanding social support's role in the relationship between maltreatment and depression in youth with foster care experience. *Child maltreatment*, *16*, 102–113.

Schell, T. L., Marshall, G. N., & Jaycox, L. H. (2004). All symptoms are not created equal: The prominent role of hyperarousal in the natural course of posttraumatic psychological distress. *Journal of Abnormal Psychology*, *113*, 189–197.

Schwab-Stone, M., Chen, C., Greenberger, E., Silver, D., Lichtman, J., & Voyce, C. (1999). No safe haven II: The effects of violence exposure on urban youth. *Journal of the American Academy of Child & Adolescent Psychiatry*, *38*, 359–367.

Schwartz, D., & Gorman, A. H. (2003). Community violence exposure and children's academic functioning. *Journal of Educational Psychology*, *95*, 163–173.

Selner-O'Hagan, M. B., Kindlon, D. J., Buka, S. L., Raudenbush, S. W., & Earls, F. J. (1998). Assessing exposure to violence in urban youth. *Journal of Child Psychology and Psychiatry*, *39*, 215–224.

Singer, M. I., Anglin, T. M., Song, L. Y., & Lunghofer, L. (1995). Adolescents' exposure to violence and associated symptoms of psychological trauma. *Journal of the American Medical Association*, *273*, 477–482.

Sippel, L. M., Pietrzak, R. H., Charney, D. S., Mayes, L. C., & Southwick, S. M. (2015). How does social support enhance resilience in the trauma-exposed individual? *Ecology & Society*, *20*, 136–145.

Stein, B. D., Jaycox, L. H., Kataoka, S., Rhodes, H. J., & Vestal, K. D. (2003). Prevalence of child and adolescent exposure to community violence. *Clinical Child and Family Psychology Review*, *6*, 247–264.

Stice, E., Ragan, J., & Randall, P. (2004). Prospective relations between social support and depression: Differential direction of effects for parent and peer support? *Journal of Abnormal Psychology*, *113*, 155–159.

Thompson, T., & Massat, C. R. (2005). Experiences of violence, post-traumatic stress, academic achievement and behavior problems of urban African-American children. *Child and Adolescent Social Work Journal*, *22*, 367–393.

White, K. S., Bruce, S. E., Farrell, A. D., & Kliewer, W. (1998). Impact of exposure to community violence on anxiety: A longitudinal study of family social support as a protective factor for urban children. *Journal of Child and Family Studies*, *7*, 187–203.

Wilson, D. K., Kliewer, W., Teasley, N., Plybon, L., & Sica, D. A. (2002). Violence exposure, catecholamine excretion, and blood pressure nondipping status in African American male versus female adolescents. *Psychosomatic Medicine*, *64*, 906–915.

Wilson, L. C., & Scarpa, A. (2014). Childhood abuse, perceived social support, and posttraumatic stress symptoms: A moderation model. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*, 512–518.

Yehuda, R., Halligan, S. L., & Grossman, R. (2001). Childhood trauma and risk for PTSD: Relationship to intergenerational effects of trauma, parental PTSD, and cortisol excretion. *Development and Psychopathology*, *13*, 733–753.

Youngstrom, E., Weist, M. D., & Albus, K. E. (2003). Exploring violence exposure, stress, protective factors, and behavioral problems among inner-city youth. *American Journal of Community Psychology*, *32*, 115–129.

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