SOCIAL SUPPORT AND SOCIAL CONSTRAINTS MODERATE THE RELATION BETWEEN COMMUNITY VIOLENCE EXPOSURE AND DEPRESSIVE SYMPTOMS IN AN URBAN ADOLESCENT SAMPLE

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This longitudinal study examined whether the perceived availability of adult social support and low levels of adult social constraints in talking about violence could potentially mitigate the positive relation between community violence exposure and depressive symptoms among 216 inner-city youth (45% male, 92% African American). The majority of youth (90%) reported witnessing violence or being victimized at least once in the prior year. Perceived social support, social constraints, and depressive symptoms were assessed at two waves via self-report, eight months apart. Longitudinal regression analyses controlling for baseline depressive symptoms revealed interactive effects of community violence exposure and both social variables on depressive symptoms. Violence exposure at Time 1 was positively related to Time 2 depressive symptoms among youth with high levels of social constraints or low levels of social support, but not among youth with low levels of social constraints or high levels of social support. The moderating effects of social constraints and social support were independent of one another. The implications of this research for social interventions are discussed.
In 2008, more than 60% of youth aged 17 and younger in the United States were exposed to community violence in the past year (Finkelhor, Turner, Ormrod, & Hamby, 2009). An estimated 46% of youth were assaulted; 25% were victims of robbery, theft, or vandalism; 10% were maltreated; 6% were sexually victimized; and 25% witnessed a violent act (Finkelhor et al., 2009). Community violence exposure is particularly common among youth who live in poor urban neighborhoods (DuRant et al., 2000) and has been linked to post-traumatic stress disorder (PTSD) symptoms, internalizing symptoms (e.g., anxiety, depression) and externalizing behaviors (e.g., aggression, drug use; see Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009 for a meta-analysis; Margolin & Gordis, 2000; Vermeiren, Schwab-Stone, Deboutte, Leckman, & Ruchkin, 2003). Research on risk and protective factors in the context of violence helps to identify those youth most and least at risk for adverse psychological and behavioral outcomes and points to directions for intervention (Aisenberg & Herrenkohl, 2008; Lepore & Revenson, 2006). This paper specifically examines how both positive and negative qualities of adolescents’ social relationships—or social risk and protective factors—moderate the relation between community violence exposure and depressive symptoms.

Youth who are exposed to community violence often want to talk with someone about what they have experienced (Campbell & Schwarz, 1996). Indeed, people of all ages typically want to talk with others about stressful life events (Derlega & Berg, 1987; Lepore, Fernandez-Berrocal, Ragan, & Ramos, 2004; Lepore, Ragan, & Jones, 2000; Rimé, Corsini, & Herbette, 2002). Sharing stress-related thoughts and feelings with members of one’s social network is often used to solicit or express a need for social support. To the extent that social support is provided, it may help to buffer youth from the adverse behavioral (Gorman-Smith, Henry, & Tolan, 2004) and psychological effects of violence exposure (Hammack, Richards, Luo, Edlynn, & Roy, 2004; Ozer, 2005; Ozer & Weinstein, 2004). A higher level of violence exposure is related to a greater likelihood of violence perpetration, however this association may be attenuated by social support (Gorman-Smith et al., 2004). Additionally, children who are exposed to community violence but also receive social support and monitoring from parents may be less likely to smoke or abuse alcohol (Sullivan, Kung, & Farrell, 2004). Finally, violence-exposed youth who enjoy a high quality, emotionally-connected relationship with a caregiver report lower levels of anxiety...
Social support may buffer youth from the effects of exposure to violence through a variety of mechanisms, including reducing perceived threat and feelings of vulnerability and enhancing feelings of control and self-efficacy (Benight & Bandura, 2004; Lepore, 1997).

The security and coping assistance provided by supportive others may not always be adequate to deal with very high levels of threats caused by violence exposure (Kliewer et al., 2004). Additionally, social network members do not always respond in ways that are perceived to be supportive by the recipient (Lepore, 1992, 1997). Receiving unsupportive or even negative and dismissive responses to one’s disclosures of stress-related thoughts and feelings may create feelings of social constraints in the discloser (Badr & Taylor, 2006; Herbette & Rimé, 2004; Lepore, Silver, Wortman, & Wayment, 1996). Social constraints reflect the perception among those who have been exposed to a traumatic event that they must inhibit themselves from expressing trauma-related thoughts and feelings to others and have been associated with poor psychological outcomes (Lepore & Revenson, 2007). Feelings of social constraints have been associated with greater stress-related intrusive thoughts and poorer psychological functioning (Braitman et al., 2008; Cordova, Cunningham, Carlson, & Andrykowski, 2001; Lepore & Helgeson, 1998; Lewis, Derlega, Clarke, & Kuang, 2006; Ullrich, Lutgendorf, & Stapleton, 2002; Widows, Jacobsen, & Fields, 2000; Zakowski et al., 2003). Social constraints may increase avoidance in thinking about or discussing trauma-related thoughts and feelings (Lepore & Helgeson, 1998). This avoidance can reduce opportunities for individuals to cognitively process and make sense of stressful experiences, which, in turn can increase distress (Lepore, 1997; Lepore & Revenson, 2007).

In relation to violence disclosure, two cross-sectional studies have shown that youth who were both exposed to violence and perceived that they had high social constraints in talking about violence with others were at the greatest risk for symptoms of depression and PTSD (Kliewer, Lepore, Oskin, & Johnson, 1998; Ozer & Weinstein, 2004). In a study of 99 middle-school students recruited from predominantly minority urban neighborhoods, Kliewer and colleagues (1998) found that youth with high levels of violence exposure combined with either low social support or high social constraints had the highest levels of intrusive thoughts about violence. Furthermore, youth with high levels of intrusive thoughts about violence combined with either low social support or high social constraints had
the highest level of internalizing symptoms. In a study of 349 multi-
ethnic, urban middle school students, Ozer and Weinstein (2004)
found that youth who reported having a mother who was relatively
unhelpful when they had a personal problem reported a higher fre-
cquency of depressive symptoms and PTSD symptoms as overall ex-
posure to violence increased than did youth with a helpful mother.
The same pattern was found for father’s helpfulness and PTSD
symptoms and sibling’s helpfulness and depressive symptoms. The
moderating influence of social constraints was only tested on a sub-
sample of youth who reported a description of a violent event they
experienced. Youth who reported higher constraints when discuss-
ing the violent event were more likely to report higher symptoms of
PTSD than youth with lower levels of social constraints.

Although the preliminary evidence from cross-sectional studies
suggests that social support and social constraints are unique pre-
dictors of psychological symptoms in youth exposed to community
violence, there is a need for additional longitudinal data to validate
these findings. A previous longitudinal study found that when ex-
posed to violence, youth with supportive mothers reported a de-
crase in depressive symptoms when compared to youth with non-
supportive mothers (Ozer, 2005). However, another study found
very different effects of social support depending on whether cross-
sectional or longitudinal data were used. Hammack and colleagues
(2004) found that girls at Time 1 who reported low social support
and high community violence witnessing, endorsed the highest lev-
els of anxiety. Conversely, girls who reported high social support
and high witnessing at Time 1 reported greater increases in anxiety
one year later at Time 2. These unusual findings demand further
study, as social support has typically been regarded as a protective
factor. Further, to our knowledge, no longitudinal studies to date
have assessed the effects of social constraints on violence exposure
and depressive symptoms.

The present study examined whether the longitudinal association
between community violence exposure and depressive symptoms
is moderated by the quality of youth’s social relationships (social
constraints and social support) using reliable multi-item measures.
Analyses controlled for initial levels of depressive symptoms and
evaluated the unique effects of each social variable by controlling
for the other social variable. We hypothesized that there would be
a positive relation between community violence and depressive
symptoms and this relation would be mitigated by high levels of
perceived social support from adults and parents and by low levels of social constraints in talking about violence with adults and parents. Specifically, we hypothesized: (a) level of exposure to community violence would be related to depressive symptoms among youth with low levels of social support, but not among youth with high levels of social support, and (b) level of exposure to community violence would be related to depressive symptoms among youth with high levels of social constraints, but not among youth with low levels of social constraints. This study extends the empirical literature on social risk and protective factors for youth exposed to community violence.

**METHOD**

**DESIGN AND SETTING**

This longitudinal survey study used data from a randomized controlled trial (Kliewer et al., 2007). The parent study aimed to test the efficacy of a brief behavioral intervention (expressive writing) designed to promote social (e.g., aggressive behaviors) and emotional (e.g., depressive symptoms) adjustment among youth exposed to community violence. In the control arm of the trial, youth wrote for 20 minutes, twice a week for a total of eight sessions about non-emotional topics pertaining to how they spend their time during the day. In the intervention arm of the trial, youth wrote for the same frequency and duration about their thoughts and feelings related to violence they witnessed or experienced directly. There were no effects of the intervention on children’s self-reports of depressive symptoms, which is the primary outcome in the present study. Nonetheless, to be conservative, we statistically controlled for experimental condition in all inferential analyses. Time 1 data were collected prior to students being randomized or exposed to the intervention. Time 2 data were collected six months after the writing sessions, which was approximately 8 months after Time 1. The trial was implemented in seventh grade classrooms in three public middle schools in an urban school system in the southeastern United States. The three schools had a high percentage of students from low-income families, with 62%-73% meeting the eligibility requirements for the federal free lunch program.
PARTICIPANTS

Three hundred and thirty-six youth were eligible; 258 youth received parental consent and provided assent to participate (77% recruitment rate). The majority of participants were African American/black (92%) and just over half (55%) were female. Half of the sample (49.8%) lived in a home headed by a single mother, and 17.5% lived in households with both a biological mother and father. Of the 258 youth who were consented and randomized, 42 were lost to follow-up by Time 2. Comparison of the 216 participants who were assessed at follow-up to those who did not participate in follow-up revealed no significant associations between attrition and gender, condition, social support, social constraints, and depressive symptoms at Time 1.

PROCEDURES

All study procedures were approved by the Institutional Review Board at the study institution. The measures were administered using a computer-assisted survey interview (CASI, Sawtooth Software, Inc., Sequim, WA). Laptops were brought to the schools for each respondent to complete the CASI during a scheduled class period. The CASI data collection procedures allowed the respondent to hear each question through a headset and simultaneously read the question on the laptop monitor before selecting an answer. There was a 3:1 student to staff ratio during the assessments to answer any questions and to keep respondents on task. Youths received a $10 gift card for participating in the assessment.

MEASURES

Cronbach’s alpha coefficients were calculated for each measure using baseline data. For the longitudinal analyses we included all predictor measures assessed at Time 1 and depressive symptoms assessed at Time 2 as the outcome.

Depressive Symptoms. Level of depressive symptoms was assessed at baseline and follow-up using a 10-item version of the Children’s Depression Inventory (CDI), a widely used, validated and reliable
measure (Kovacs, 1981). Respondents rated their level of depressive symptomatology (e.g., felt sad, felt like crying, felt lonely) over the prior two-week period. Total scores can range from 0 to 20, with higher scores indicating greater depressive symptomatology. The clinical cut point for depression on the CDI-10 is $\geq 7$. In the present study the measure had good reliability (Cronbach’s $\alpha = .84$).

Community Violence Exposure. Level of community violence exposure was assessed at baseline using the Survey of Children’s Exposure to Community Violence (Richters & Saltzman, 1990). This 26-item measure assesses the frequency ($0 = \text{never}$ to $4 = \text{almost every day}$) with which a child reports being directly victimized (16 items) by (e.g., Being chased by gangs or older kids) or a witness (10 items) to community violence (e.g., Seen someone beaten up or mugged) in the prior year. The measure has been used in dozens of studies of violence exposure and has strong validity (Fowler, Toro, Tompsett, & Baltes, 2009) and test-retest reliability ($r = .81$; Richters & Martinez, 1993). The witnessing and victimization subscales were highly correlated ($r = .61, p < .001$), so they were combined into a composite measure by summing the two scales. Total scores can range from 0 to 104, with higher scores indicating greater violence exposure. In the present study, the measure had good reliability (Cronbach’s $\alpha = .91$).

Moderators: Social Constraints and Social Support. Level of social constraints for discussing violence was assessed at baseline with an adapted version of the 10-item Social Constraints Scale (Lepore & Revenson, 2007; Lepore et al., 1996). The Social Constraints Scale assesses the extent to which children perceive constraints in talking about violence with a parent or other significant adult. Five items assessing constraints with a primary caregiver and five parallel items assessing constraints with another significant adult were used (e.g., How often does your parent/other significant adult change the subject when you try to talk about violence or aggression you have seen or that has happened to you?). Respondents rated on a 5-point scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = very often) how often they felt constrained when sharing violent experiences. Cronbach’s alpha in the current study was .88 for the parent subscale and .82 for the other significant adult subscale. The parent and other significant adult subscales were highly correlated ($r = .70, p < .001$), so they were combined into a composite measure by averaging the two subscale scores. When a child was missing a
score from a parent, the score from the significant other adult was used, and vice versa. Total scores can range from 5 to 25, with higher scores indicating greater social constraints.

Social support was assessed using the short form of the Network of Relationships Inventory, which has adequate internal consistency (Cronbach’s $\alpha = .77$; Plybon & Kliewer, 2001) and construct validity (Furman & Buhrmester, 1985). Social support was measured for two sources, parent (7 items) and other significant adult (7 items). Respondents indicated on a 5-point scale (1 = little or none, 2 = somewhat, 3 = very much, 4 = extremely much, 5 = the most possible) how strongly each supportive attribute was present in the relationship (e.g., How much can you count on the person named above to be there when you need him or her no matter what?). Cronbach’s alpha in the current study was .88 for the parent subscale and .82 for the significant other adult subscale. The parent and other significant adult subscales were highly correlated ($r = .66, p < .001$), so they were combined into a composite measure by averaging the two subscale scores. When a child was missing a score from a parent, the score from the significant other adult was used, and vice versa. Total scores can range from 7 to 35, with higher scores indicating greater social support.

DATA ANALYTIC STRATEGY

To address the primary research questions, longitudinal data with one predictor (community violence exposure) and two moderators (social support, social constraints) and one outcome (depressive symptoms) were examined. Means and standard deviations for each variable were calculated, followed by Pearson product-moment correlations to evaluate possible intercorrelations among gender, experimental condition, depressive symptoms, community violence exposure, social support, and social constraints. Hierarchical regression analyses were performed with control variables (gender and experimental condition) entered at step 1 along with Time 1 depressive symptoms. Analyses of social support controlled for social constraints and vice versa. Community violence and either social support or social constraints were added at step 2. Interaction variables were then added to the model at step 3. Following standard procedures, focal predictor and moderator variables were mean-centered prior to analysis (Aiken & West, 1991). Significant
interactions were further probed for interpretation. All analyses were completed using SPSS 18.0.

RESULTS

As shown in Table 1, witnessing violence was reported more frequently than direct victimization, but over half of the youth reported being physically assaulted (being slapped, hit, or punched) in the prior year. There were no significant between-gender differences in level of community violence at Time 1 except for one item: males were more likely to report being at home during an attempted break-in or forced entry, $\chi^2(1, 251) = 4.71, p < .05$.

<table>
<thead>
<tr>
<th>Type of violence</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seen someone slapped, hit, or punched</td>
<td>88</td>
</tr>
<tr>
<td>Seen someone arrested or picked up</td>
<td>84</td>
</tr>
<tr>
<td>Heard gunfire outside when in or near home</td>
<td>76</td>
</tr>
<tr>
<td>Seen someone carrying gun or knife (not police, military, or security guard)</td>
<td>60</td>
</tr>
<tr>
<td>Seen someone chased by gangs or older kids</td>
<td>55</td>
</tr>
<tr>
<td>Seen someone beaten up or mugged</td>
<td>53</td>
</tr>
<tr>
<td>Slapped, hit, or punched</td>
<td>53</td>
</tr>
<tr>
<td>Seen someone threatened with serious physical harm</td>
<td>50</td>
</tr>
<tr>
<td>Seen a person seriously wounded after violence</td>
<td>46</td>
</tr>
<tr>
<td>Seen someone using or selling drugs</td>
<td>40</td>
</tr>
<tr>
<td>Seen people asked to sell or distribute illegal drugs</td>
<td>39</td>
</tr>
<tr>
<td>Seen someone shot</td>
<td>30</td>
</tr>
<tr>
<td>Chased by gangs or older kids</td>
<td>27</td>
</tr>
<tr>
<td>Other situations where you were frightened or feared you would be hurt or die</td>
<td>27</td>
</tr>
<tr>
<td>Seen a dead body in the community (not at a funeral)</td>
<td>24</td>
</tr>
<tr>
<td>Seen someone attacked with a knife</td>
<td>24</td>
</tr>
<tr>
<td>Seen someone breaking into a house</td>
<td>23</td>
</tr>
<tr>
<td>Seen someone killed</td>
<td>23</td>
</tr>
<tr>
<td>Threatened with serious physical harm</td>
<td>18</td>
</tr>
<tr>
<td>Asked to use illegal drugs</td>
<td>17</td>
</tr>
<tr>
<td>Home broken into when away</td>
<td>15</td>
</tr>
<tr>
<td>Asked to sell or distribute illegal drugs</td>
<td>13</td>
</tr>
<tr>
<td>Beaten up or mugged</td>
<td>11</td>
</tr>
<tr>
<td>Home when someone tried to break in</td>
<td>7</td>
</tr>
<tr>
<td>Attacked with a knife</td>
<td>6</td>
</tr>
<tr>
<td>Shot with a gun</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 2 shows the mean scores, standard deviations, and intercorrelations between the major study variables. The study variables were normally distributed. Eleven percent of the study sample scored at or above the clinical cut-point (7) on the CDI at Time 1, and 10% of the sample scored at above the clinical cut-point at Time 2. Level of depressive symptoms at Time 1 and Time 2 was positively associated with Time 1 level of community violence, social constraints, and being female, and inversely associated with Time 1 level of social support. Being female was associated with a higher level of depressive symptoms at Time 1 \( \chi^2(1, 216) = 6.92, p < .01; \) and Time 2 \( \chi^2(1, 216) = 7.73, p < .01; \) 15% of females vs. 3% of males scored \( \geq 7 \) on the CDI. The gender-depressive symptoms association indicated a need to control for gender in subsequent analyses. Experimental condition was not correlated with any of the study variables, but it was included as a covariate in subsequent analyses to be conservative.

**Regression Analyses**

Possible moderating effects of gender were tested in three-way interaction analyses (violence X social factor X gender), with de-
pressive symptoms at Time 2 as the outcome while controlling for gender, experimental condition, social factor, and depressive symptoms at Time 1. No significant interaction effects were observed for gender in the social constraints interaction model ($\beta = -.37, p = .18$) or in the social support interaction model ($\beta = .59, p = .16$). Further, gender did not have a two-way interaction with violence ($\beta = -.06, p = .27$), social constraints ($\beta = -.10, p = .37$), or social support ($\beta = .09, p = .10$). Therefore, hypotheses were tested across the entire sample of boys and girls, using gender as a control variable.

The regression analyses shown in Table 3 evaluated the direct and interactive effects of community violence and social constraints at Time 1 on depressive symptoms at Time 2, controlling for gender, experimental condition, social support, and depressive symptoms at Time 1. Control variables (gender, experimental condition, depressive symptoms at Time 1, social support) were entered in step 1. Community violence and social constraints were entered in step 2 and were statistically nonsignificant. The interaction of community violence and social constraints was added to the model at step 3 and was statistically significant. The interaction accounted for 1.8% of the variance in the model. The interaction was decomposed using the MODPROBE macro for SPSS 18.0 developed by Hayes and Matthes (2009). The macro estimates model coefficients and stan-

<table>
<thead>
<tr>
<th>Predictors (All Time 1)</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$F(\Delta R^2)$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td>.32</td>
<td>.25 .33**</td>
<td></td>
<td>-.12*</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Experimental Condition</td>
<td></td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive Symptoms</td>
<td></td>
<td>.50**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Support</td>
<td></td>
<td>-.11*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>.34</td>
<td>.012</td>
<td>1.84</td>
<td>.08</td>
</tr>
<tr>
<td>Community Violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Constraints</td>
<td></td>
<td></td>
<td></td>
<td>.07</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td>.35</td>
<td>.018</td>
<td>5.64*</td>
<td>.41*</td>
</tr>
<tr>
<td>Community Violence X</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Social Constraints</td>
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</tr>
</tbody>
</table>

Notes. Time 1 = baseline; Time 2 = 8 months after baseline. Focal predictor and moderator were mean-centered prior to analysis. * $p < .05$; ** $p < .001$. aGender: 1 = male; 0 = female.
standard errors for the model estimating an outcome variable from the predictor, moderator, and the interaction of the two, as well as variables used as statistical controls. The MODPROBE macro also calculates simple slopes for the effects of the predictor on the outcome at specified values (one standard deviation above and below the mean) of the moderator as well as regions of significance tests. A visual plot of the interaction can then be produced by imputing the resulting tables into the graphical user interface of SPSS. As shown in Figure 1, the longitudinal, positive association between community violence exposure and depressive symptoms was statistically significant only among youth who reported relatively high levels of social constraints. Among youth with low levels of social constraints, the slope trended in a negative direction, but was not significantly different from zero.

The regression analyses shown in Table 4 evaluated the direct and interactive effects of community violence and social support at Time 1 on depressive symptoms at Time 2, controlling for gender, experimental condition, social constraints, and depressive symptoms at Time 1. Control variables (gender, experimental condition, depressive symptoms at Time 1, social constraints) were entered in step 1. Community violence and social support were entered in step
The purpose of this study was to evaluate how the quality of youth’s social relationships—or social risk and protective factors—might moderate the relation between community violence exposure and depressive symptoms using a longitudinal design. The study was conducted with a sample of urban, predominantly African American youth at high risk for violence exposure. Reported levels of witnessing violence and direct victimization were consistent with previous studies assessing community violence exposure among urban youth and were statistically nonsignificant. The interaction of community violence and social support was added to the model at step 3 and was statistically significant. The interaction accounted for 1.4% of the variance in the model. As shown in Figure 2, a longitudinal, positive association between community violence exposure and depressive symptoms was statistically significant among youth who reported low levels of social support. Among youth with high levels of social support, the slope trended in a negative direction, but was not significantly different from zero.

**DISCUSSION**

The purpose of this study was to evaluate how the quality of youth’s social relationships—or social risk and protective factors—might moderate the relation between community violence exposure and depressive symptoms using a longitudinal design. The study was conducted with a sample of urban, predominantly African American youth at high risk for violence exposure. Reported levels of witnessing violence and direct victimization were consistent with previous studies assessing community violence exposure among urban youth and were statistically nonsignificant. The interaction of community violence and social support was added to the model at step 3 and was statistically significant. The interaction accounted for 1.4% of the variance in the model. As shown in Figure 2, a longitudinal, positive association between community violence exposure and depressive symptoms was statistically significant among youth who reported low levels of social support. Among youth with high levels of social support, the slope trended in a negative direction, but was not significantly different from zero.
middle-schoolers (Kliewer et al., 2004; Ozer & Weinstein, 2004). Approximately 77% of the sample experienced or witnessed more than one act of community violence in the past year. This sample reported a slightly higher point prevalence (11% and 10%) of depression than has been reported in other community samples of adolescents, which have had prevalence estimates of major depressive disorder (MDD) of approximately 2% in children and between 4 and 8% in adolescents (Fleming & Offord, 1990; Lewinsohn, Clarke, Seeley, & Rohde, 1994; Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993). The National Survey on Drug Use and Health found that 4% of 12-13 year olds reported a major depressive episode (MDE) in the past year (SAMHSA, 2009). The time frame used in this study was the past two weeks which should have produced a much lower percentage when compared to studies of MDE in the past year. However, this population presents as much more distressed than national samples. Similar to previous studies with youth samples (Petersen, Sarigiani, & Kennedy, 1991; Twenge & Nolen-Hoeksema, 2002), females in the present sample reported a higher level of depressive

FIGURE 2. Interactive effects of social support (Time 1) on the relation between community violence exposure (Time 1) and depressive symptoms (Time 2). Simple slopes are reported. Notes. This analysis controlled for gender, experimental condition, depressive symptoms at Time 1, and social constraints. Time 1 = baseline; Time 2 = 8 months after baseline. 
symptoms than males. Consistent with our expectations, the quality of youth’s social relationships moderated the relation between community violence exposure and later depressive symptoms.

Previous cross-sectional studies of youth exposed to community violence found that a higher level of social constraints was associated with a higher level of PTSD symptoms, including intrusive thoughts (Kliewer et al., 1998; Ozer & Weinstein, 2004) and that a lower level of social support was associated with a higher level of intrusive thoughts and depressive symptoms (Hammack et al., 2004; Kliewer et al., 1998; Ozer & Weinstein, 2004). Another study found conflicting results, suggesting that social support was protective against levels of anxiety in cross-sectional analyses, but a risk for increased levels of anxiety in longitudinal analyses (Hammack et al., 2004). The current study found that both social support and social constraints moderated the relation between violence exposure and depressive symptoms in the expected direction, using longitudinal data and statistical controls for potential confounds. In the context of low social support, violence exposure was positively associated with depressive symptoms over time. When reporting high social support, violence exposure was negatively associated with symptoms over time, however the slope was not significantly different from zero. In the context of high social constraints when talking about violent events, violence exposure was positively associated with depressive symptoms over time. When reporting low social constraints, violence exposure was negatively associated with depressive symptoms over time; however the slope was not significantly different from zero. These results further solidify the risks associated with low social support and high social constraints in the context of community violence exposure. Due to the nature of the study design, the findings cannot establish causality, however, these findings provide preliminary evidence for the temporal ordering of social relationships when predicting depressive symptoms.

Importantly, the constraints model controlled for social support and the support model controlled for social constraints, indicating that these variables operate independently. Further, the correlation analyses revealed little association between social constraints and social support. Conceptually, social support may be a protective factor whereas social constraints may be a risk (or vulnerability) factor for youth exposed to community violence. There are theoretically independent mechanisms of social support and social constraints, which may further explain their independent influence on the rela-
tion between community violence and depressive symptoms. Social support may buffer youth from violence by reducing perceived threats and feelings of vulnerability and enhancing feelings of controls and self-efficacy. Social constraints, on the other hand, may increase avoidance in thinking about or discussing trauma-related thoughts and feelings, which would reduce the opportunity for youth to cognitively process and make sense of violent experiences, leading to increased psychological stress. There is a need for further research in order to identify possible mediators of these social variables on depressive symptoms in the context of violence. Furthermore, when conducting the current analyses, the moderating effects of each social variable controlled for the effects of the other social variable (i.e., the effects were independent). Thus, interventions designed to mitigate the adverse psychological effects of community violence on youth should address both social factors.

There are several limitations of the study. First, the sample was predominantly African American so it is unknown whether these findings can be generalized to other at-risk adolescents of different racial or ethnic backgrounds. Second, only two social moderators were examined, yet there are likely other factors that could increase or decrease depression in youth who are exposed to community violence. For example, parental monitoring may buffer the effect of community violence exposure on externalizing (Pettit & Bates, 1999; Sullivan et al., 2004) and internalizing symptoms (Ceballo, Ramirez, Hearn, & Maltese, 2003). Third, all measures relied solely on self-report, which are subject to biases. One problem with self-report measures is that associations can be inflated due to shared methods variance. However, this limitation does not explain the observed interactions. And fourth, although the study was longitudinal in design and increases confidence in the direction of the observed relations, there are still possible alternative explanations due to spurious influences on the predictor and outcome variables.

IMPLICATIONS FOR PREVENTION

Schools might provide ideal settings within which the unmet social and emotional needs of youth exposed to violence might be addressed because a large number of affected youth attend school daily and there are often resources within the school to help those youth. In the school setting, violence prevention programs are al-
ready commonplace. It would be fairly easy to supplement violence prevention programs with interventions designed to help victims and victim witnesses of violence. For example, group- or individual-level interventions with school counselors or nurses, peer support groups, or other interventions designed to provide students with safe outlets for discussing violence-related concerns and fears may be beneficial for students who lack safe social outlets outside of school. Similarly, community-based centers and youth organizations could provide settings for helping youth to cope with violence exposure, but the reach would not be as great as through the schools. The current findings also suggest that positive relationships with parents and other significant adults may mitigate the negative psychological effects of violence on youth, so programs that improve family communication and relationships would potentially be beneficial. Alternatively, providing caring mentorship from nonfamilial adults may be beneficial to at-risk youth.

In conclusion, this study provides evidence that social support is a potential protective factor and social constraints a potential risk factor among youth exposed to community violence. The findings suggest that both providing support and minimizing social constraints is important for reducing negative psychological outcomes associated with violence. More research is needed to identify effective psychosocial interventions for at-risk youth and great care must be applied when implementing any interventions that invite youth to discuss and reflect on their experiences with violence.

REFERENCES


