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Cognitive, Affective, and Behavioral Responses to Witnessed Versus Experienced Violence

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Abstract

Cognitive, affective, and behavioral responses to experiencing or witnessing violence were examined in a sample of 263 inner-city youth (94% African American, 49% male, $M_{\text{age}} = 12.06$, $SD = 1.61$, 52% 5th graders, 48% 8th graders). The youth participated in Wave 1 of a larger, longitudinal study for which they completed the Social Competence Interview (SCI; Ewart, Jorgensen, Suchday, Chen, & Matthews, 2002), a process whereby the youth relive witnessing or experiencing a recent act of violence. The interview was audiotaped and coded for emotional responses, goals, and coping behaviors. Adolescents who had been victimized were angry; expressed concerns about being negatively evaluated by self and others; expressed revenge goals; and coped by using primary engagement, social support, and aggressive strategies. Adolescents who had witnessed violence were fearful, concerned about others being harmed and losing relationships, focused on survival, and coped by using avoidant strategies. Responses were similar across gender. Where interactions existed, differences between responses to victimization and witnessing violence were more pronounced among middle, versus early, adolescents. These results suggest that more attention should be given to coping processes associated with the different types of violence youth encounter.

Keywords

African American inner-city youth; Social Competence Interview; violence exposure; victimization; witnessing violence; experienced violence; responses to violence; stress and coping theory; coping processes; goals; emotional responses

Studies of the effects of violence exposure on youth have progressed significantly since the first articles were published in the early 1990s. It is now well documented that youth, particularly youth living in inner cities, have high rates of exposure to violence; Research has shown that anywhere from 76% to 93% of adolescents have been exposed to community violence (Mazza & Reynolds, 1999; Ozer & Weinstein, 2004). Victimization rates for adolescents (aged 12–19 years) are twice as high as for adults 25 years or older (Fitzpatrick & Boldizar, 1993). More youth witness versus directly experience violence (Miller, Wasserman, Neugebauer, Gorman-Smith, & Kamboukos, 1999), but many youth are both victims of and witnesses to violence (Gorman-Smith & Tolan, 1998; Miller et al., 1999).

Youth who experience violence in their schools and neighborhoods are at greater risk for a host of adjustment problems, including depression, anxiety, post-traumatic stress disorder, aggression, delinquency, drug use and abuse, and poor academic performance (Lynch, 2003; Margolin & Gordis, 2000). Researchers also have documented that being victimized is more strongly associated with internalizing problems than the witnessing of violence (e.g., Fitzpatrick & Boldizar, 1993; Martinez & Richters, 1993), although both forms of exposure are linked to heightened risk for internalizing and externalizing adjustment problems (cf. Lynch, 2003). Some research (e.g., Boxer et al., 2008) has suggested that witnessing violence is more strongly associated with externalizing problems compared with experiencing violence directly, especially if the victimization is at a “low level” of exposure. Yet, others have argued that it is difficult to disentangle the effects of victimization and witnessed violence for youth living in high violence areas due to the improbability of finding adolescents who have experienced one form of community violence exposure but not the other (Overstreet, Dempsey, Graham, & Moely, 1999).

A recent meta-analysis by Fowler, Tompsett, Braciszewski, Jacques-Tiura, and Baltes (2009) attempted to clarify previous findings regarding the impact of violence exposure type on youth outcomes. They used data from 116 samples drawn from 110 studies published between 1987 and July 2005 to examine the effects of violence exposure on child and adolescent ($N = 39,667$) adjustment. Their analyses found that direct victimization was a stronger predictor of internalizing symptoms than witnessing community violence. When examining predictors of externalizing symptoms, the results indicated that victimization and witnessing violence were not significantly different (Fowler et al., 2009). In general, the effect of one type of violence was not controlled for when examining the association of another type of violence on adjustment. The findings of their meta-analysis suggest that for internalizing and externalizing symptoms, the effects of proximity of exposure vary by outcome. When examining predictors of PTSD outcomes separate from other internalizing symptoms, Fowler et al. (2009) found no significant differences between victimization and witnessing violence. Taken together, previous findings support the notion that victimization and witnessed violence are strongly associated with adjustment.

In the present study, we apply stress and coping theory (Lazarus & Folkman, 1984) to understanding youths' responses to different types of violence exposure. We begin with the observation that relatively little work has investigated the ways in which types of violence exposure (i.e., witnessing vs. direct victimization) are linked to individual responses to stress (i.e., emotions, cognitions, and behaviors). From a basic science perspective, responses to stress (i.e., emotion dysregulation and cognitive appraisals) may mediate the link between specific forms of violence exposure and maladjustment (Schwartz & Proctor, 2000). Volitional responses to stress (e.g., coping behaviors) also may be conceptualized as either moderators or mediators that can thwart psychologic maladjustment (Rosario, Salzinger, Feldman, & Ng-Mak, 2003). From an applied perspective, understanding the emotional, behavioral, and cognitive sequelae of violence exposure—all of which are part of the coping process—can help to design and refine interventions for violence-exposed youth. For example, if specific maladaptive cognitions are identified in response to victimization but not witnessing violence, interventions could be tailored to address those cognitions.

Although the application of stress and coping theory to youths' experiences with violence is useful from both basic and applied perspectives, the current literature has several limitations. First, although there is a growing body of research on how youth cope with violence generally (cf. Dempsey, 2002; Kliwer et al., 2006; McGee, 2003; Rosario et al., 2003; Scarpa & Haden, 2006), only a handful of studies have examined coping processes—the emotions, threat appraisals, and coping efforts—that are unique to the type of violence exposure youth experience. Schwartz and Proctor (2000) conducted a cross-sectional study examining correlates of different types of violence exposure in a sample of 285 inner-city youth in Grades 4 through 6. The authors found that direct victimization was related to emotion regulation difficulties and was simultaneously associated with social difficulties including peer rejection, aggression, and bullying by peers. Witnessing violence was associated with an increased belief in the effectiveness of violence as a way of solving disputes, which in turn was related to higher aggressive behavior (Schwartz & Proctor, 2000). A second cross-sectional study by Boxer et al. (2008) examined different pathways—a normalization pathway and a distress pathway—leading from witnessing and experiencing violence to aggression and emotional distress in 105 youths between the ages of 6 and 16. Their analyses showed that witnessing violence led to normative beliefs about the acceptability of aggression, which in turn was associated with aggressive behavior. In contrast, victimization was associated with higher levels of avoidant coping, which in turn was related to emotional symptoms.

Both the Schwartz & Proctor (2000) and Boxer et al. (2008) studies examined children's responses to overall exposure of violence, inclusive of witnessed and experienced. Other longitudinal studies (Gorman-Smith & Tolan, 1998; Guerra, Huesmann, & Spindler, 2003) have demonstrated prospective associations between overall levels of violence exposure and depression and aggressive behavior. Guerra et al. (2003), for example, found that violence exposure was associated with elevations in aggression, normative aggressive beliefs, and aggressive fantasies, and that social-cognitions mediated the relations between exposure to violence and aggressive behavior in elementary school-aged youths. These studies, however, did not examine how type of violence exposure was differentially associated with stress processes.

Our study complemented prior work in this area by using stress and coping theory (Lazarus & Folkman, 1984) to examine multiple aspects of the stress response associated with either the experience of witnessing or directly experiencing violence. Previous work in this area has considered beliefs about violence and aggression, including efficacy and positive outcome expectancies (Bradshaw, Rodgers, Ghandour, & Garbarino, 2009; Guerra et al., 2003; McMahon, Felix, Halpert, & Petropoulos, 2009; Schwartz & Proctor, 2000), coping (Boxer et al., 2008; Kliewer & Sullivan, 2008), and emotion dysregulation (Schwartz & Proctor, 2000) as processes in the link between exposure to violence and adjustment. No prior study, however, examined processes differentially associated with witnessing violence versus direct victimization and focused on multiple dimensions of the coping process identified by Lazarus and Folkman (1984). Our work considered emotional responses, threat appraisals, goals, and coping behaviors, each of which were identified by Lazarus and Folkman (1984) as important factors. Aspects of the coping process were examined individually in light of literature showing that violence exposure can affect these singular processes. For example, Kliewer and Sullivan (2008) found that threat appraisals in response to violence exposure mediated adjustment 1 year later, and other studies have found a link between youths' emotional responses to violence and problem solving strategies and internalizing problems (Kochenderfer-Ladd, 2004). We studied these processes by examining youths' recall and responses to a recent victimization or witnessing experience using the SCI (Ewart et al., 2002). We included threats of victimization in our "victimized" group because threats of harm are commonly included in measures of victimization (Richters & Saltzman, 1990). Further, we examined how age and gender interact with type of violence exposure to investigate whether responses to victimization versus witnessing violence are similar across the period of early adolescence and across gender.

Developmental differences in the effects of stressful experiences have received a fair amount of attention. Researchers posit that changes across development, specifically increased cognitive development, a wide range of social interactions, and increased autonomy influence the ways adolescents respond to stress as they grow older (Hoffman, Levy-Schiff, Sohlberg, & Zarizki, 1992). Although there are clearly defined differences between adult and young children's responses to stress (Eisenberg, Fabes, & Guthrie, 1997), it is important to continue to examine developmental differences within adolescence. For example, in a sample of 7th-, 9th-, and 12th-grade students ($N = 375$), Griffith, Dubow, and Ippolito (2000) found that as youths moved through adolescence, their use of approach coping strategies increased, especially within the context of family and peer stressors. Additionally, 9th-grade students reported a greater use of avoidance strategies in response to school stressors than younger youths (Griffith et al., 2000).

Responses to stress have also been shown to differ by gender. In general, females report exposure to more stressful events as well as more distress in response to the situations (Griffith et al., 2000; Roecker, Dubow, & Donaldson, 1996). In regards to emotional responses, Griffith et al. (2000) found that in response to exposure to stress in the domains of family, school, and peer group, girls reported being more upset by each stressor, as well as having higher levels of state anxiety. In examining behavioral responses to stress, Eschenbeck, Kohlmann, and Lohaus (2007) argued that girls, more frequently than boys, reported the use of two coping strategies: seeking social support and problem solving. The

authors found that boys, on the other hand, tended to use more avoidant coping (2007). Other research, however, has revealed a different pattern of results. For instance, the study by Griffith et al. (2000) found that girls reported using higher levels of avoidant coping behaviors in response to family and peer stressors. Flannery, Singer, Williams, and Castro (1998) found that when confronted with violence, girls employed more internalizing coping behaviors, and males used more instrumental, or problem-focused, coping behaviors. These differences in findings point to a need for further understanding of the role gender plays in the behavioral responses to exposure to stress, particularly violence exposure.

Although age and gender influence responses to stress during adolescence, the literature cited in this section points to the importance of avoiding generalizations of demographic differences across all situations. Depending on the type of situation faced (e.g., violence exposure versus a conflict with a teacher at school), youths may employ different cognitive, emotional, and behavioral strategies to deal with the situation. Griffith et al. (2000) found that youths reported using more approach coping behaviors in response to school and peer-related stressors and more avoidant coping behaviors in response to stressors in the family domain.

In summary, the primary purpose of the present study was to use stress and coping theory (Lazarus & Folkman, 1984) to identify differences in adolescent coping processes in response to witnessed or experienced violence. We predicted that youths would demonstrate differences in the way they reacted to violence in the domains of emotion, cognition, and behavior based on the type of violence experienced. We hypothesized that:

1. Anger would predominate in victimization experiences, and fear would predominate when youths witnessed violence. We based this expectation on research conducted by Nishina and Juvonen (2005) with middle school students showing that anger increased on days when youths experienced peer harassment and not on days when youths witnessed others being harassed.
2. Threats to self would be more salient in victimization experiences, and threats to others would emerge when witnessing violence. This notion was based on a longitudinal study of violence exposure, threat appraisals, and adjustment by Klierer and Sullivan (2008) in which victimization was more strongly associated with threats to the self than witnessing violence.
3. Revenge would be more commonly expressed in response to victimization versus witnessing violence.
4. Primary engagement coping efforts would be most evident for victimization experiences versus witnessing violence, because some victimization experiences are at least partially controllable. We also predicted that aggression would be a more common coping response to victimization versus witnessing violence. These expectations were based in part on work by Dirks, Treat, and Weersing (2007) showing that aggression was one of the top two responses to physical victimization by a peer in a sample of 12- to 14-year-olds.

Further, age and gender were examined as moderators of differences in the associations of type of violence exposure on these coping processes.

Method

Participants

We interviewed 358 youth as part of a larger longitudinal study examining the relations of violence exposure, coping, and adjustment during the transitions into middle and high schools. Participants in the present study included 263 of these youth (94.1% African American, 49% male, $M_{\text{age}} = 12.06$ years, $SD = 1.61$ years) who had discussed a situation that involved witnessing violence or being physically victimized or threatened during the SCI. Youths were either in the fifth (52%; 69 males and 68 females; age range: 9–12) or eighth (48%; 59 males and 67 females; age range: 12–16) grade. Half of the sample had household incomes of \$301–400 per week or less. About a quarter (24.3%) of the caregivers had not completed high school; 32.2% had completed high school or had a general education diploma; 43.5% had some education beyond high school, including an associate's or vocational degree; and 7.0% had a bachelor's degree or higher. A range of family structures was represented in the sample, though many (42.7%) of the caregivers had never married. A third (29.5%) of the caregivers were married or cohabiting at the time of the study, 15.3% were separated, 10.6% were divorced, and 1.9% were widowed.

Youths from the larger study (i.e., inclusive of youths who did not participate in the present study) were compared on demographics and exposure to violence. Youth who were included in the analyses had maternal caregivers who were less well educated than nonparticipants, $t(354) = 2.02, p < .05$, and were marginally more likely to have lower household incomes, $t(352) = 1.93, p < .06$. Not surprisingly, youths who were included in the analyses reported witnessing, $t(353) = 4.16, p < .001$ and experiencing, $t(353) = 2.70, p < .01$ more violence in the community as measured by the Richters and Saltzman (1990) measure of community violence exposure, as well as more peer victimization, $t(353) = 3.56, p < .001$, as measured by the overt peer victimization subscale of the Problem Behavior Frequency Scale (Multisite Violence Prevention Project, 2006).

Procedure

Participants were recruited from neighborhoods in the greater Richmond, Virginia, metropolitan area. U.S. Census data from 2000 indicate that 61% of 15- to 24-year-olds in Richmond were African American, and 61% of children lived in neighborhoods classified as high in poverty (The Annie E. Casey Foundation, 2004). Richmond was ranked the ninth most dangerous city among all U.S. cities with populations over 75,000 based on 2003 FBI violent crime statistics (Nolan, 2004). Participants were recruited from neighborhoods that had high levels of violence and/or poverty based on police statistics and census data (e.g., DeNavas-Walt, Proctor, & Lee, 2005). Participants were recruited through community agencies and events, and by canvassing qualifying neighborhoods via flyers posted door-to-door. Eligible families needed to speak English, have a fifth or eighth grader living in the home, and have a female caregiver available to be interviewed. Eligible respondents were

scheduled for interviews, which were conducted by teams of two interviewers in participants' homes unless a family requested to be interviewed elsewhere.

The parent interviewer reviewed the consent and assent forms with the family and answered any questions. The caregiver received a copy of the signed consent form. After the adolescent and maternal caregiver provided written consent, the caregiver and adolescent separated for their respective interviews. Additional assent was provided by the adolescent before initiating the interviews. Only data from the adolescent participant is reported here. Face-to-face interviews using visual aids to illustrate the response options were used to collect the data, and all questions were read aloud, with the exception of a small portion of the adolescent interview.

As part of the procedure, adolescents completed the SCI (Ewart et al., 2002), a 15–20 min audiotaped interview in which adolescents were asked to reexperience their most stressful event of the past couple of months. For this project, adolescents were prompted to discuss situations that involved witnessing or experiencing violence. As a guide for choosing a stressful event, adolescents were asked to rank eight categories of types of violence from most to least stressful. The interviewer then asked the adolescent to identify a recent, stressful situation that exemplified the category the adolescent deemed the most stressful (described in the Procedures section). The interviewer then guided the adolescent through a series of semi-structured questions in which the adolescent reexperienced the stressor and recalled his/her *coping* responses and *affect* during the stressful event. The second half of the SCI focuses on the adolescent's ideal ending to the situation and how that ending could be achieved (the "ideal" ending formed the basis for *goals coding*). Once the SCI had ended, adolescents completed a questionnaire measure of threat appraisals. Description of the SCI coding is following. For the present study, only youths who discussed a situation in which they witnessed violence ($n = 121$) or were physically victimized by or threatened with violence ($n = 142$), including aggression from peers, were included in the analyses. Tests for interviewer ethnicity and gender effects revealed no systematic biases, $ps > .10$. Interviews lasted approximately 2.5 hr and participating families received \$50 in gift cards at each wave.

The project was approved by the Institutional Review Board at the first author's institution. Because of the level of risk in the study, additional safety precautions were taken. First, a Certificate of Confidentiality was obtained from the National Institutes of Health. Second, interviewers received detailed training in how to respond to caregiver or adolescent distress.

Measures

Four independent teams coded: (a) event type, (b) coping responses, (c) affective responses, and (d) goals described during the SCI. All coders were trained in the relevant coding system, and reliability was achieved ($Kappas > 0.80$) on each code. In addition, youths completed a questionnaire measure that assessed their threat appraisals (Kliewer & Sullivan, 2008) related to the discussed event.

Events coding—The first step in our process was to code the type of event the adolescent discussed in the SCI. The type of event discussed was coded into mutually exclusive

categories by two research assistants. For purposes of this article, two categories of events were included: (a) physical victimization and threats of victimization by peers and others in the community, and (b) witnessed violence. Youths who discussed relational victimization were not included in the analyses. In terms of victimization, one adolescent described the following:

We was outside at the school basketball court so he wanted to fight ... so he started checkin' me really hard and stuff 'til it came to the point where I ain't wanna play anymore. So, then I ain't wanna play anymore so he thought I was being a punk or something. So we ended up fighting right beside the court.

Another boy described the following experience:

I was going to the store to get my grandma a loaf of bread. Then the dudes, holding something like they had a gun. I just started walking faster. After I kept walking fast, they cocked right so I had just walked in Family Dollar's, other than Food Circus, hoping they'll overlook the building. When I came out, they were still waiting for me so I asked the lady if I could go out the back door, and she let me, and then I fled and I just stopped going to the store.

Witnessing violence involved any of 21 different types of situations in the community. One adolescent described this situation:

Because, mmm, I saw a dead [body], the blood, the bullets and the car. I got scared that somebody might, that person might come back around and shoot again, and it might be me or one of my family members.

Youths who discussed being victimized or threatened reported more community violence victimization, $t(259) = 2.98, p < .01$, and peer victimization, $t(260) = 2.21, p < .05$ during the past year than youths who discussed witnessing violence. There were no group differences, however, in the amount of community violence witnessed.

Goals coding—Goals coding began with a review of the literature for relevant goals. The coding system of Ewart et al. (2002) was used as a starting point but was augmented as the context indicated. Once the goal categories and definitions were established, research assistants were trained to reliability and commenced with coding. Any discrepancies in coding were resolved via discussion. Eighteen different goals were identified in the transcripts. For coding purposes, each goal was identified as present or absent. Because of the low frequency of many of the goals, only the six most frequently endorsed goals were used in the analyses. These included: revenge, dominance, avoidance/withdrawal, survival, acceptance, and justice/fairness (see Table 1 for definitions).

Affect coding—Interviewers asked youths to recall their emotional responses to the stressor (e.g., "*How did you feel?*"). We coded all emotions that youths recalled experiencing during or as a direct result of the stressful event. All emotion words were recorded and coded into three families of negative affect: anger (e.g., angry, aggravated, and irritated), fear (e.g., anxious, worried, and scared), and sadness (e.g., sad, empty, and alone). Thus, we collapsed lower-order emotion words into higher-order emotion families. Each higher-level emotional state (i.e., emotion family) was coded as present or absent.

Coping coding—We began coding coping behaviors by using responses included in commonly used measures of youth coping (e.g., the Response to Stress Questionnaire (RSQ); Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000; the Children's Coping Strategies Checklist (CCSC); Ayers, Sandler, West, & Roosa, 1996). Our list of coping behaviors was expanded as additional coping responses not found in the above measures were identified. Once coping categories and definitions were established, research assistants were trained to reliability and any discrepancies in coding were resolved via discussion. Thirty-four different coping responses were identified in the transcripts. For coding purposes, each coping response was identified as present or absent. For analytic purposes, coping strategies that were theoretically similar were grouped into categories. These categories included: primary engagement, secondary engagement, avoidance/distraction, support seeking, emotional release, and aggression. Within each coping category, the number of different types of coping behaviors endorsed was added to create a total score (see Table 1 for definitions).

Threat appraisal—A 24-item measure of threat appraisal, the Threat Appraisals of Negative Events Scale (Kliewer & Sullivan, 2008), was used to capture cognitive evaluations of the violence. There are six 4-item subscales on the measure: physical harm to self, harm to others, negative self-evaluation, negative evaluation by others, material loss, and loss of relationship. In completing the questionnaire measure in the present study, youths were asked to think about the event they had described in the SCI. They were asked to rate how much they felt or were concerned about each of the 24 statements when the event occurred, and were reminded that for some of the questions they might not feel that way at all if that was not something they were concerned about. Response options ranged from 1 (*not at all*) to 4 (*a lot*). Scores were added to compute a total, with higher scores indicating greater threat. Validity and reliability of the measure have been established (Kliewer & Sullivan, 2008). Validity was established by showing longitudinal associations with adjustment, after controlling for overall levels of violence exposure. Cronbach alphas for the subscales were: Harm to others, 0.72; Physical harm to self, 0.79; Negative evaluation by others, 0.66; Negative self-evaluation, 0.65; Material loss, 0.71; and Loss of relationship, 0.81. The actual range on all subscales was 4–16.

Overall violence exposure—The Survey of Children's Exposure to Community Violence (Richters & Saltzman, 1990) was used to assess an adolescent's overall level of community violence exposure. Two subscales of this measures were used that assessed the frequency an adolescent had been victimized by or witnessed about 20 different forms of violence and violence-related activities within the community. Respondents indicated how often (0 = *never* to 8 = *almost every day*) they had been victimized (10 items) or witnessed violence (21 items) in the past year. Validity has been demonstrated by associations in the expected direction on a range of adjustment measures (e.g., Kliewer & Sullivan, 2008). Total frequency scores were computed by summing across the number of items. Peer victimization during the last year was assessed with a modified version of the overt peer victimization subscale of the Problem Behavior Frequency Scales (Multisite Violence Prevention Project, 2006). Seven items assessed physical victimization or threat of victimization. In an effort to

correspond to the community violence measure, the response format ranged from 0 (*never*) to 8 (*almost every day*). Higher scores reflect greater exposure.

Results

Descriptive Information

Justice/fairness and acceptance were the goals mentioned most frequently. Anger was a dominant emotional response, although fear and sadness were frequently mentioned. Although a range of coping strategies were represented, primary engagement and support-seeking strategies were mentioned most frequently (see Table 2 for descriptive information on the threat appraisals, goals, affect, and coping behaviors).

Multivariate Analyses of Variance (MANOVAs) Examining Coping Process Differences in Experiencing Versus Witnessing Violence

A series of 2 (Type of Violence) $\times$ 2 (Grade Level) $\times$ 2 (Gender) MANCOVAs were used to evaluate the associations of type of violence and interactions with age and gender with cognitive, affective, and behavioral responses to violence exposure. Maternal caregiver education and household income were controlled in all analyses because of their known associations with parent and family stress, which can influence child outcomes (McLoyd, 1998).

Threat appraisals—The first set of analyses included the six threat appraisals as the outcomes. There was a significant multivariate (Wilks's Lambda) effect of type of violence, $F(6, 243) = 5.86, p < .001$, but no Type of Violence $\times$ Grade or Type of Violence $\times$ Gender interactions. There were significant univariate effects for: Threat of Harm to Others ($p < .01$), Threat of Loss of Relationship ($p < .05$), Threat of Negative Evaluation by Others ($p < .05$), and Threat of Negative Self-Evaluation ($p < .01$). Threats of harm to others and loss of relationship were more salient for witnessed violence, and threats of negative evaluation by others or the self were more salient for victimization (see Table 2). The Threat of Negative Evaluation by Others and Negative Self-Evaluation were both qualified by Age Group $\times$ Type of Violence interactions, with little difference in these threats across type of violence for fifth graders, but pronounced differences among eighth graders.

Goals—Goals were examined next. There was a significant multivariate (Wilks's Lambda) effect of type of violence, $F(6, 231) = 4.09, p < .001$, but similar to threat appraisals no Type of Violence $\times$ Grade or Type of Violence $\times$ Gender interactions. Revenge ($p < .05$) and Survival ($p < 0.001$) goals differed across type of violence. Revenge was only present in situations involving victimization, and survival predominated in situations where violence was witnessed versus experienced (see Table 2).

Affect—Consistent with the other analyses, there was a significant multivariate (Wilks's Lambda) effect of type of violence, $F(3, 229) = 6.10, p < .001$, but no Type of Violence $\times$ Grade or Type of Violence $\times$ Gender interactions. There was also a main effect of age group, $F(3, 229) = 3.97, p < .01$. Anger ($p < .001$) and fear ($p < .001$), but not sadness, differed by type of violence experienced. Twice as many youth who were victimized expressed anger

versus those who witnessed violence (see Table 2). The opposite finding was observed for fear, with a third of those victimized expressing fear, and over half of those who witnessed violence expressing that emotion. In terms of age group, fifth graders (41.8%) expressed more sadness than eighth graders (23.9%).

Coping—Six different types of coping strategies were examined. For *primary engagement coping strategies* there was a significant multivariate (Wilks's Lambda) effect of type of violence, $F(9, 233) = 3.97, p < .05$, as well as an Age Group $\times$ Type of Violence interaction. Youth who discussed being victimized reported more primary engagement coping strategies (see Table 2). Fifth graders reported similar levels of primary engagement coping across types of violence; the differences were apparent for eighth graders. In contrast to these findings, there were no main or interaction effects for *secondary engagement coping strategies*. *Avoidance coping* yielded a main effect for type of violence, $F(9, 233) = 5.11, p < .05$, but no interactions with age group or gender. Youths who discussed witnessing violence reported more of this type of coping. There also was a main effect of type of violence for *support-seeking coping*, $F(9, 233) = 6.82, p < .01$, as well as a main effect of gender, $F(9, 233) = 10.47, p < .001$. Victimized youth sought out more social support than did youth who witnessed violence (see Table 2). Females ($M = .82, SE = 0.06$) engaged in more support-seeking coping than males ($M = 0.53, SE = 0.06$). There were main effects of gender as well for *emotional release coping*, $F(9, 233) = 20.20, p < .001$, but no other main or interaction effects. Females reported more emotional release strategies ($M = 0.26, SE = 0.03$) than males ($M = 0.04, SE = 0.04$). Finally, *aggressive coping* differed by type of violence experienced, $F(9, 233) = 67.83, p < .001$, and there were no interactions with age group or gender. Youths who discussed being victimized reported more aggressive coping responses than youths who discussed witnessing violence (see Table 2).

In summary, youths who discussed an experience in which they had been victimized relative to youths who discussed witnessing violence expressed concerns about being negatively evaluated, either by others or by themselves; expressed desires for revenge; felt angry in response to the victimization; and coped by using primary engagement, support-seeking, and aggressive strategies. When type of violence interacted with age group, in all cases fifth graders had similar responses to the type of violence they discussed, whereas eighth graders showed more differentiated responses. In contrast, youths who discussed an experience where they witnessed, versus experienced, violence had concerns that others were being harmed; worried about losing relationships; felt fear; had survival as their most salient goal; and coped by avoiding thinking about the situation and distracting themselves.

Discussion

The present study used stress and coping theory to build upon previous research and examine cognitive, affective, and behavioral components of the process of coping with victimization versus witnessed violence in a sample of early adolescents. We found that youths responded differently to experiences of victimization versus witnessing violence. There were few interactions between type of violence exposure and gender, which suggests that the coping process was similar for the male and female adolescents in this sample.

When type of violence interacted with age group, the differences in responses to violence were evident among middle adolescents but not early adolescents.

Consistent with our expectations, anger was a more common emotional response to victimization and fear predominated when violence was observed versus experienced. The importance of emotion in the coping process was emphasized in Lazarus and Folkman's seminal work (Lazarus & Folkman, 1984). Lazarus (1991) asserted that emotion not only influences coping, but suggested that coping then subsequently shapes emotion. A more recent study by Kochenderfer-Ladd (2004) highlighted the important influence emotions play in the process of coping with violence exposure. She found that a child's emotional response to being victimized is related to his or her choice of coping strategies. Specifically, her study revealed that victims of peer aggression who responded predominantly with anger were more likely to seek revenge against their oppressor, and victimized youth who were predominantly afraid were more likely to seek help from others.

Threat appraisals also differed by violence exposure type. Youths who witnessed violence were more concerned with threat of harm to others and threat of loss of relationship, whereas youths who were victimized were more concerned about negative evaluation by others and negative self-evaluation. Lazarus and Folkman (1984) highlighted the importance of appraisals in their work, but little research has focused on appraisal processes—specifically, appraisals of threat—in response to witnessing or experiencing violence from peers or in the community. Threat appraisals are important because they are theorized to “drive” coping efforts, and reflect the meaning and importance individuals attach to stressful events. Our data show that adolescents who were victimized, compared with youths who witnessed violence, evidenced concern about being negatively evaluated, both by others and by themselves. This pattern of focus on negative self-evaluation may help explain why youths who were victimized in the Schwartz and Proctor (2000) study showed deficits in emotion regulation, and why youths in the Boxer et al. (2008) study engaged in avoidant coping in response to victimization. Negative evaluation of the self may focus attention away from adaptive problem solving and toward responses that emanate from both lack of emotional control and a desire to move away from stimuli associated with the stressor.

In addition to affect and appraisals, some goals were distinctly associated with a specific form of violence exposure. The goal of survival was more strongly associated with witnessing violence, and revenge was more salient for youths who were victimized. The goal associated with victimization can be linked to the threat appraisals associated with this violence exposure type. If an adolescent is concerned about being negatively evaluated, it is logical that the adolescent may desire to alleviate these concerns by means of revenge, which can be conceptualized as elevating one youth over another in regard to “power.” Such actions may reduce concerns of negative evaluation. These findings are important because researchers have shown that youths with revenge goals use fewer prosocial coping strategies and have more negative affect than youths with other types of goals, especially in conflict situations (Delveaux & Daniels, 2000). Of course, not all victimized youths report revenge goals. Some of our qualitative work on goals in the context of exposure to violence showed that similar to youths with revenge goals, youths with acceptance goals have strong feeling of negative affect, but are able to regulate their behavior and refrain from engaging in

retaliatory behavior. Further, these youths had more adaptive coping strategies. Strategies such as apologizing, refraining from being physically aggressive, and ignoring were mentioned prominently as well (Kliewer, Ray, Wheat, Goodman, & Reid-Quinones, 2009).

Our findings revealed that some coping strategies were differentially related to violence exposure type. Primary engagement coping strategies, use of social support, and aggressive coping were reported more frequently by youths who discussed a victimization experience; avoidance was mentioned more frequently by youths who discussed witnessing violence. These differences in coping may directly relate to differences in affect, threat appraisals, and goals. Youths who discussed a victimization experience were angry, wanted revenge, and were concerned about being negatively evaluated. Primary engagement strategies and support-seeking can be viewed as ways to ameliorate anger and reduce threats of negative evaluation, either by directly dealing with the source of the problem or by seeking reassurance related to threats to the self. Aggressive strategies also may be viewed in this light, as angry youths bent on revenge may use aggression as a way to resolve the situation from their point of view.

In contrast, youths who discussed witnessing violence expressed more avoidant coping than youths who discussed victimization. Fear and the drive for survival, also salient to these youths, may have driven them to not engage with the violence but rather withdraw and flee from it. Our findings do conflict with those of Boxer et al. (2008), who found that avoidant coping was related to victimization, but not witnessing violence. It should be noted that Boxer et al. (2008) did not include measures of positive coping (e.g., problem-focused or approach-oriented).

The nature of coping efforts evoked by experiencing or witnessing violence does matter for later adjustment (e.g., Boxer et al., 2008; Kliewer et al., 2006; Rosario, Salzinger, Feldman, & Ng-Mak, 2008). In general, active coping, when accompanied by adequate emotional and behavioral regulation, is associated with better mental health. Aggressive coping, in contrast, is associated with maladjustment. Thus, knowing the affective and cognitive triggers of certain types of coping can aid interventionists in helping youths to cope more adaptively.

In the current study, age was not as potent a predictor of responses to violence exposure as theories of cognitive and emotional development would suggest. Only one main effect of age groups was found—younger youths reporting more sadness than older youths. The remaining findings with age group involved interactions with violence exposure type, specifically, for threats of negative evaluation by self or others and primary engagement coping. In each case, fifth graders were similar in their responses across type of violence exposure, and eighth graders were responsible for the observed main effects of type of violence. With regard to threat appraisals, these data indicate that eighth graders were more likely to discriminate and personalize types of threat and to engage with victimization versus witnessing experiences. This may reflect increased sophistication in thinking about appraisals or may reflect some normalization of violence that comes after witnessing violence over a period of time. Older youths may have come to believe that they have little or no control over the violence they witness (e.g., Brown, O'Keeffe, Sanders, & Baker, 1986), and thus tend to engage more in situations that involve direct victimization.

There were two main effects of gender in the study. Females reported more social support-seeking and more emotional release coping in response to violence. These findings are consistent with work by Eschenbeck et al. (2007) and Flannery et al. (1998), whose research revealed gender differences in the use of coping strategies in response to violence exposure. They also mirror findings in the broader coping literature, which finds that females are more likely to seek out and prefer social support in response to stress (Rose & Rudolph, 2006).

Study Strengths and Limitations

The present study builds on theory to examine multiple aspects of responses to violence exposure using an interview protocol that evoked personally meaningful experiences in a relatively large sample of inner-city youth. The study is not without limitations, however. The cross-sectional design and correlational data preclude conclusions about causality. Further, although the SCI served as a useful tool in that it allowed adolescents to discuss a situation that they found meaningful, the fact that youths responded to different events meant that the interviews were not standardized.

Summary and Implications

In conclusion, these results illustrate the different cognitive, affective, and behavioral responses youths employ to witnessed versus experienced violence, and suggest that more attention needs to focus on the type of violence exposure encountered by youths. Although we and others (Boxer et al., 2008; Schwartz & Proctor, 2000) have focused on the distinction between witnessing versus experiencing violence, researchers might further explore how youths process different types of victimization. Different patterns of peer victimization or victimization in the community might be associated with distinct coping processes.

From an intervention perspective, clinicians working with youths who have been exposed to violence should assess not only the severity of the event and trauma-related anxiety symptoms, but also the individual's emotions, threat appraisals, goals, and coping behaviors in response to the event. Identifying these reactions to the violent event can aid clinicians in identifying youths who are more likely to experience greater symptom severity. Further, clinicians can focus treatment on reframing appraisals and identifying more adaptive goals rather than focusing exclusively on trauma-specific symptoms. As discussed, eighth graders displayed more differentiated responses to witnessed violence versus victimization than fifth graders. We assert that this may result from the ability of older youths to assess the situations more logically, thus allowing them to engage in more adaptive coping efforts. Intervention approaches with younger youths could include a focus on helping the youths identify what is within their control in respect to the exposure and teaching them which coping strategies to employ with controllable versus uncontrollable stressors.

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Table 1**Definitions of Threat Appraisals, Goals, Affect, and Coping Behaviors**

	Definitions
Threat appraisals	
Physical harm to self	Concerns that the child would sustain a physical injury of some sort
Harm to others	Concerns that others would be harmed physically or emotionally
Loss of relationship	Concerns that someone close to the child would not be able to “be there” for the child
Material loss	Concerns that the child would lose a valued possession or that the child’s activities would be restricted
Negative evaluation by others	Concerns that others would disrespect or otherwise think badly of the child
Negative self-evaluation	Concerns that the child was to blame; feeling like the child let him/herself down
Goals	
Revenge	Desires physical or emotional retaliation
Dominance	Desires to remain in control of the situation and to stand up for oneself
Avoidance/withdrawal	Desires to remove oneself from perceived dangerous people or places or to not experience the reality of the situation. Also includes the desire to not experience upset or tension, and not to continue to experience victimization
Survival	Desires to endure the situation with the least amount of injury or loss; strong sense of self-protection
Acceptance	Desires sympathy, understanding, unconditional loyalty, restoration of past relationship, or affiliation with protective forces (gangs, police, parents, etc.)
Justice/fairness	Desires the aggressor to realize extent of wrongdoing, desires intervention by an outside force (family, police, teacher, etc.), seeks aggressor to be punished, seeks the “right” thing to be done in the situation, seeking reversal of wrongdoing ever being done
Affect	
Anger	Anger that the adolescent recalled experiencing during or as a direct result of the stressful event
Fear	Fear that the adolescent recalled experiencing during or as a direct result of the stressful event
Sadness	Sadness that the adolescent recalled experiencing during or as a direct result of the stressful event
Coping: Active/primary engagement	Direct engagement with the stressor including planning or thinking about ways to solve the problem; engaging in efforts to improve the problem situation; efforts to find meaning in the problem situation or to understand it better; considering ways to not get oneself into the situation, especially with a focus on safety; efforts to avoid the problem by staying away from it or leaving it; actively ignoring provocation and choosing not to react
Coping: Secondary engagement	Engagement with the stressor that does not include directly acting on the problem. Includes positive and optimistic thinking, a sense of control, emotion regulation, positive cognitive restructuring, minimization, and acceptance/resignation
Coping: Avoidance/distraction	Disengagement from the stressor including wishful thinking, denial, repression, and physical distraction
Coping: Support-seeking	Using instrumental or emotional support from others inside or outside of the family. Includes seeking help from God or a higher power in solving the problem or acting as a sounding board; using prayer or other religious practices
Coping: Emotional release	Efforts to release emotions including artistic or written expression, physical activity, or verbal emotional expression
Coping: Aggression	Efforts to solve the problem by threatening others with physical or emotional harm or engaging in physical, relational, or verbal actions designed to harm

Table 2

Descriptive Information on the Study Variables

	Total sample	Victimization	Witnessing
Threat appraisals			
Physical harm to self	7.75 (0.21)	7.82 (0.28)	7.68 (0.21)
Harm to others ^a	9.47 (0.20)	8.95 (0.26)	9.98 (0.29)
Loss of relationship ^a	7.37 (0.22)	6.89 (0.30)	7.84 (0.33)
Material loss	7.19 (0.19)	7.32 (0.26)	7.05 (0.28)
Negative evaluation by others ^a	6.34 (0.17)	6.69 (0.23)	6.00 (0.25)
Negative self-evaluation ^a	5.86 (0.15)	6.21 (0.20)	5.41 (0.22)
Goals			
Revenge ^a	4.1%	7.4%	0%
Dominance	12.4%	15.5%	9.3%
Avoidance/withdrawal	20.5%	24.8%	16.2%
Survival ^a	12.6%	4.2%	20.9%
Acceptance	20.5%	25.1%	15.9%
Justice/fairness	37.8%	35.3%	40.2%
Affect			
Anger ^a	53.4%	71.5%	35.2%
Fear ^a	44.6%	29.7%	59.6%
Sadness	32.8%	32.5%	33.2%
Coping			
Primary engagement ^a	0.85 (0.06)	0.96 (0.08)	0.73 (0.09)
Secondary engagement	0.28 (0.04)	0.33 (0.05)	0.23 (0.06)
Avoidance/distraction ^a	0.16 (0.04)	0.10 (0.04)	0.22 (0.04)
Social support-seeking ^a	0.68 (0.05)	0.80 (0.06)	0.56 (0.07)
Emotional release	0.15 (0.02)	0.17 (0.03)	0.12 (0.04)
Aggression ^a	0.29 (0.03)	0.56 (0.04)	0.01 (0.05)

Note. Means are adjusted for maternal caregiver education level and household income. Standard errors are in parentheses.

^aIndicates a significant difference across types of violence exposure discussed.