EXPOSURE TO COMMUNITY VIOLENCE AND CONFLICT DURING ADOLESCENCE:
DOES CONFLICT WITHIN A FRIENDSHIP CONTRIBUTE TO HIGHER LEVELS OF
AGGRESSION?

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Youth who have been exposed to community violence have been found to be more likely to report higher levels of aggression than those who have not been exposed. Few studies have examined the moderating role of a supportive friendship on community violence and aggression. However, to the best of my knowledge, no studies have investigated how conflict within a friendship may contribute to higher levels of aggression after being exposed to violence. Therefore, the current study examined the possible contribution of conflict within a friendship in the association between exposure to community violence and aggression. Participants were 164 Toledo-area adolescents recruited from community organizations (i.e., YMCA, YWCA, East Toledo Family Center, Adelante, Upward Bound). Results indicate a main effect for friendship conflict on aggression, but friendship conflict did not moderate the effects of exposure to community violence. The effects of direct victimization on aggression were moderated by gender, with females demonstrating a stronger association than males. Implications of these findings are discussed.
I dedicate this dissertation to Janice Zeman, PhD, who taught me the joy of participating in clinical psychology research and has since given her support to me in research and life.
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INTRODUCTION

An increase in exposure to community violence in children and adolescents during the 1980s was seen in several major cities (e.g., Chicago, Washington, D.C., New York, Los Angeles) across the United States (Richters & Martinez, 1993). Since that time, research on the effects, risks, and consequences of community violence for children and adolescents has gained popularity in the literature. Exposure to community violence has been defined as “frequent and continual exposure to the use of guns, knives, drugs, and [other acts of] random violence” (Osofsky, 1995, p. 782). Witnessing violence and being a victim have been included as varying types of exposure within this definition (Overstreet, 2000). According to the Bureau of Justice Statistics, in 2010 3.9% of children age 17 or younger lived in a household in which at least one person aged 12 years or older experienced a violent crime (Bureau of Justice Statistics, 2010). A large variance in the percent of population witnessing violence may be due to different subgroups reporting such as youth from minority ethnic backgrounds or youth living in urban areas being exposed to more violence than other youth (Overstreet, 2000). For instance, the Bureau of Justice Statistics indicated that African American youth experienced the highest rates of serious violent crime in 2010 when compared to other ethnic groups. The effects of exposure to community violence vary by youth; exposure to community violence, either as a victim or witness, has been associated with such diverse outcomes as depression, anxiety, and aggression (Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009; Moses, 1999). Although past literature has found several individual risk factors associated with negative outcomes in adolescents who have been exposed to violence, more research is needed to clarify how these individual risk factors may accumulate or interact to lead to more severe outcomes.
Youth who have been exposed to community violence, either as a victim or a witness, are at
greater risk for many negative outcomes such as aggression (Fowler, et al., 2009; Moses, 1999).
Fowler and colleagues (2009) conducted a meta-analytic review of exposure to violence and
mental health outcomes. They found that community violence has a large effect on externalizing
symptoms ($d = .63, p \leq .01$). Further, the results indicated that adolescents reported a stronger
relationship between exposure to violence and externalizing symptoms than did children ($d =
.98, p \leq .001$). These findings are consistent with a conceptualization of exposure to community
violence as a significant stressor in the lives of many children and adolescents that may
contribute to feelings of hostility and aggression, and place them at risk for engaging in
aggressive behaviors. For instance, Barroso and colleagues (2000) found that witnessing
community violence was associated with engagement in aggressive behaviors. Additionally, they
found that as the frequency of witnessing community violence increased, so too did self-reported
aggression, suggesting that repeated and/or frequent exposure to violence or aggression might
lead adolescents to view aggressive behavior as normative, increasing the likelihood that they
will engage in aggressive behaviors themselves. The current study explores the roles of age,
gender, and friendship conflict in moderating the effects of exposure to community violence on
aggression. In the next sections, I will briefly review relevant literature on theoretical models
related to exposure to violence and aggression, the relation between these two variables, and
potential moderating roles that friendship conflict, gender, and age may have on this relation.

Models of Exposure to Violence and Aggression

Several researchers have investigated the relation between varying types of exposure to
violence and aggression and found that higher levels of exposure to community violence (ECV)
are associated with higher levels of aggression (Barroso, et al., 2000; Fowler, et al., 2009;
This link can be explained using a number of theoretical models. Models such as the social information processing model, and the more comprehensive general aggression model (GAM), emphasize the importance of changes in cognitions as a mediator between exposure to violence and aggressive behaviors (Anderson & Bushman, 2002; McMahon, Felix, Halpert, & Petropoulos, 2009).

**Social information processing model.** Past literature on the social information processing model has found that processing casual behaviors of others can contribute to one’s behaviors (Crick & Dodge, 1994). Four steps are enacted within this model: 1) encoding of situational cues; 2) interpreting the cues; 3) searching for possible responses to the situation from long-term memory; and 4) selection of a response. For instance, an adolescent is pushed into a locker at school. During the first step, the adolescent focuses on the cues surrounding being pushed (e.g., the presence of others, eye contact, past history with the person). In the second step the adolescent interprets the encoded cues (e.g., he was looking at me, he walked away therefore he pushed me on purpose). The third step involves generating several responses to the initial pushing behavior (e.g., push him back, ignore the behavior) and choosing one option. In the last step, the adolescent enacts the chosen behavioral response. For instance, Robinson and colleagues (2001) posited that through mechanisms related to the social-cognitive and information processing models of aggression, adolescents who behave aggressively after exposure to violence could be responding or reacting to the violence that they witness and/or in which they are directly involved. Calvete and Orue (2011) furthered this investigation when they longitudinally examined violence exposure and aggression through the social information...
processing model. They found that witnessing violence was associated with reactive aggression through hostile attribution and response selection. Regarding direct victimization, they found that victimization predicted reactive aggression through only hostile attribution. Exposure to violence has been associated with an increase in aggressive fantasies and violence-approving attitudes, supporting the social-cognitive perspective that exposure to violence increases aggression by changing schemas and attitudes regarding aggressive behavior (Musher-Eizenman, et al., 2004; Su, Mrug, & Windle, 2010). Witnessing violence may be related to aggressive behaviors through modeling, as adolescents exposed to violence may learn to behave similarly. As they continue to witness and/or be victimized, the social-cognitive schemas surrounding aggression may start to become more ingrained. As they become more ingrained, adolescents may start to become more aggressive through the cumulative effect of victimization. At the same time, repeated exposures to violence could lead to emotional desensitization to aggression.

*General aggression model.* The General Aggression Model (GAM) incorporates elements of the social information processing model in its focus on how an individual perceives a situation and chooses from among a number of possible responses (Crick & Dodge, 1994), but expands on this and similar models to elaborate more on internal processes as well as including more attention to impulsive/irrational acts of aggression. Specifically, the GAM asserts that knowledge structures *(a)* develop out of experience; *(b)* influence perception at multiple levels, from basic visual patterns to complex behavioral sequences; *(c)* can become automatized with use; *(d)* can contain (or are linked to) affective states, behavioral programs, and beliefs; and *(e)* are used to guide people’s interpretations and behavioral responses to their social (and physical) environment (Anderson & Bushman, 2002, pg. 33). For instance, if an adolescent was pushed into a locker, he would first assess the situation where this incident took place, and his individual
characteristics such as his age, gender, and prior experiences would influence this assessment. The adolescent would then assess his present internal state, including his thoughts, feelings, and his ability or need to take action on his thoughts and feelings (e.g., “I feel mad,” “He meant to push me into that locker,” “It was a mistake, he looks like he’s in a hurry”). Next, the adolescent examines each outcome and makes a decision as to how he should react. The reaction could be a thoughtful (e.g., ignore the pushing behavior) or an impulsive (e.g., pushing the perpetrator) response. Regardless of reaction, the outcome and the adolescent’s appraisal of the outcome will then influence future social encounters. Exposure to violence may then increase an adolescent’s tendency to perceive a social stimulus as aggressive, which may then lead him to react with anger and/or heightened arousal, and positively appraise aggressive responses. In addition, the GAM includes recognition that an individual’s aggressive behaviors can alter the environment, and through a form of a “feedback loop” contribute to the likelihood that the individual will be exposed to greater violence in the future (Anderson, Buckley, & Carnagey, 2008).

Cumulative risk model. As with these social-cognitive models of aggression, cumulative risk models also attempt to integrate a variety of risk factors in explaining negative outcomes, and cumulative risk models focused on aggression have included both internal and other types of risk factors (Appleyard, Egeland, van Dulmen, & Sroufe, 2005; Aro, et al., 2009; Atzaba-Poria, Pike, & Deater-Deckard, 2004; Boxer, et al., 2009; Spano, Pridemore, & Bolland, 2012; Thorpe, 2007). The cumulative risk hypothesis asserts that the accumulation of risk factors, independent of the type of risk factor, impacts developmental outcomes such as aggression (Appleyard, et al., 2005). Although a significant amount of research has investigated the mental health outcomes of a single risk factor, less attention has historically been given to the cumulative effects of several risk factors on a single outcome (Aro, et al., 2009). However, a number of recent studies have
demonstrated that cumulative exposure to different types of violence, along with other risk factors, is predictive of aggression in adolescence (Appleyard et al., 2005; Farrell & Bruce, 1997; Spano, et al. 2012; Zona & Milan, 2011). Some evidence demonstrates that an index of cumulative risk is more important than specific single risk factors, across different types of risk factors (Appleyard et al., 2005; Atzaba-Poria, et al., 2004).

Some of the risk factors that have been investigated in the literature in adolescents have been poverty, gender, varying types of exposure to community violence, and friendship quality. Atzaba-Poria and colleagues (2004) investigated the cumulative risk model in relation to behavioral outcomes in adolescents. They found that the accumulation of risk factors (e.g., low socio-economic status, lower intelligence, poor friendship quality, strained parent and sibling relationships, harsh parental discipline) was associated with elevated levels of negative behavioral outcomes. Other researchers have included life stress, exposure to specific types of violence, and interactions between individual and other risk factors in their indices of cumulative risk (Appleyard et al., 2005; Farrell & Bruce, 1997; Zona & Milan, 2011). A major focus of the current study is to take a subset of variables identified in studies of cumulative risk and to examine whether they demonstrate an interactive on aggression. To that end, I will review existing findings on how each of the variables of interest are associated with aggression, then examine the current, limited, evidence of interactions between these variables. While the cumulative risk model demonstrates that having multiple risk factors, rather than one or two, raises risk for engaging in aggressive behavior, understanding the degree to which risk factors exacerbate each other can take our understanding of cumulative risk to a new level.

**Friendship Conflict.** The Social Information Processing model can provide an overarching understanding of how peer conflict may contribute to greater expression of anger across
settings (Quigley, Jaycox, McCaffrey, & Marshal, 2006). Specifically, when conflict or an argument presents itself in an adolescent friendship, the friends may cope with the argument through anger or heightened aggression. This may reinforce any previous modeling of aggressive anger expression by parents or other influences, and can increase an adolescent’s tendency to use aggressive anger expression to cope with negative emotions. Studies that focus on conflict within a friendship compared with friend support, consistently find that youth who perceive higher levels of conflict than support in their primary friendship are more likely to report higher levels of aggressive behaviors (Cillessen, Jiang, West, & Laszkowski, 2005; Scarpa & Haden, 2006).

Friendship conflict has also been found to create extreme stress reactions in adolescents, which in turn, cause an over-use of cognitive resources (Opotow, 1991; Rabaglietti & Ciairano, 2008; Rose & Rudolph, 2006; Wassdorp, Bagdi, & Bradshaw, 2010). Waasdorp and colleagues (2010) found that adolescents are likely to use ruminative or avoidant coping strategies when experiencing conflict within a friendship. This stress response to conflict then becomes a maladaptive coping mechanism that uses much of the adolescent’s cognitive resources (Rose & Rudolph, 2006). The overuse of these resources can then contribute to global adjustment problems such as aggression and lack of ability to appropriately cope with other types of stressors such as lack of school success or exposure to violence. For instance, Rabaglietti and Ciairano (2008) found that conflict within friendships was negatively associated with school success over time, suggesting that the stress associated with conflict within a friendship can impair concentration or otherwise impede an adolescent’s ability to function in an academic setting.

Although past literature has examined and found an effect of friendship conflict on negative behavioral outcomes, such as aggression, no study, to the best of our knowledge, has
investigated the effects of friendship conflict among adolescents who have also been exposed to violence. Therefore, the current study intends to further a more nuanced understanding of the cumulative effects of these risk factors by looking at the potential effect of friendship conflict on the relationship between exposure to violence and aggression. It seems plausible that an adolescent who is involved in conflict with a friend would be devoting much of his or her cognitive resources to the rift in the relationship. This devotion could then lead to greater feelings of stress and limit remaining cognitive resources for coping with additional stressors such as exposure to community violence. While the role of peer aggression in influencing adolescent aggression is well-established (e.g., Harding, 2008; Patterson, Reid, & Dishion, 1992; Winstok & Perkis, 2008), a small body of research suggests that conflict within a friendship can contribute to an adolescent’s aggressive behaviors (Benhorin & MacMahon, 2008; Fanti, Brookmeyer, Henrich, & Kuperminc, 2009; Kupersmidt, Burchinal, & Patterson, 1995; Quigley, et al., 2006; Waasdorp, et al., 2010). The current study examines the moderating role of friendship conflict on aggression in adolescents who have been exposed to community violence.

**Gender.** Extant literature has found that males report higher levels of aggression than females (Barker, Tremblay, Nagin, Vitaro, & Lacourse, 2006; Karriker-Jaffe, Foshee, Ennett, & Suchindran, 2008; Lim & Ang, 2009; Werner & Crick, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005) although some studies have not supported this pattern (Card, Stucky, Sawalani, & Little, 2008; Pathak, Sharma, Parvan, Gupta, Ojha, & Goel, 2011; Snethen & van Puymbroeck, 2008). Specifically, Snethen and van Puymbroeck (2008) reported that males continue to commit more violent crimes than females, but the change in arrest rates from 2001-2005 was greater for females than for males. Much of the literature focusing on gender differences in aggression has found that females are more likely to engage in relational rather than physical aggression (Xie,
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Cairns, & Cairns, 2002; Xie, Drabick, & Chen, 2011). Xie and colleagues (2011), as part of a larger longitudinal study, found different developmental trajectories of overt aggression by gender. Specifically, they found that males were significantly over-represented in the “high aggression” trajectory whereas females were significantly over-represented in the “low aggression” trajectory. Because the majority of the relevant literature has found differences in aggression by gender, the current study will also attend to the role of gender in predicting externalizing behavior. Given the emphasis on physical aggression in the outcome measure, the male participants in the current study are expected to report higher levels of externalizing behaviors than the female participants.

Gender differences have also been found in friendship conflict (Black, 2000; Demir & Urberg, 2004). Past literature has indicated that males are more likely to create intimacy in friendships through shared activities, whereas girls create intimacy through discussion and self-disclosure (McNelles & Connolly, 1999). At the same time, males have been found to rate their friendships higher in conflict than females, and exhibit more avoidance and withdrawal behaviors during conflict resolution tasks than females (Black, 2000). This finding suggests that males are less likely than females to resolve conflict through verbal communication. Demir and Urberg (2004) continued this line of research in both quantitative and qualitative dimensions. They found that conflict in girls' friendships have a negative effect on adjustment, but not for boys. These results seem to suggest that while females may be more effective at resolving conflict than males, the effect of conflict within friendships may be more detrimental for females than males.

In addition to gender differences in aggression and friendship conflict, past research has also found differences in aggression and exposure to violence (Calvete & Orue, 2013; Farrell &
Bruce, 1997; Tisak, Wichorek, & Tisak, 2011). Tisak and colleagues (2011) found that males were both victimized more and committed more physically aggressive acts than females. In a longitudinal investigation of the effects of exposure to community violence, Farrell and Bruce (1997) found that boys reported engaging in significantly more violent behavior than females. However, the results also indicated that changes in frequency of violent behavior was significantly greater for females than males after being continually exposed to community violence. It appears possible that the higher rates of aggressive behavior observed among males in general puts males at greater risk for also being exposed to community violence, as males may be more likely to behave in ways that place them at risk for being victimized or otherwise exposed to physical aggression by others. Calvete and Orue (2013) examined the moderating effects of gender on exposure to domestic violence and aggression. Specifically, they found that exposure to family violence was more closely associated with aggression for females than males. These authors argue that violence may have a greater impact on girls’ aggression due to their greater socialization to be sensitive to interpersonal processes; girls may be more apt than males to experience significant change in aggressive interpersonal schemas in response to witnessing interpersonal violence. Therefore, I expect to find a similar moderating effect by gender, and I hypothesize that females will show a stronger link between exposure to violence and aggression than males.

Age. Other than potential gender differences, age differences have also been found to be related to aggressive behavior (Card, et al., 2008; Côté, Vaillancourt, LeBlanc, Nagin, & Tremblay, 2006; Karriker-Jaffee, et al., 2008; Russell, Kraus, & Ceccherini, 2010; Tisak, et al., 2011; Toldos, 2005). For instance, Karriker-Jaffee and colleagues (2008) found that among adolescents, physical aggression seemed to peak by age 15 and decline after that time. Therefore,
aggressive behaviors may be most prevalent during the early teenage years and diminish as they continue to develop into late adolescence and early adulthood. Karriker-Jaffee and colleagues (2008) hypothesized that this curvilinear trajectory may be due to the consistent presence of adults during minor childhood acts of aggression and the lack of adult presence during adolescence when youth are more likely to commit deliberate acts of aggression; they suggest that older adolescents may not be committing fewer acts of aggression, but rather, are able to commit them more covertly than they were able to in their childhood. Although this hypothesis seems plausible, Card and colleagues’ (2008) meta-analytic review found that older adolescents are less likely than their younger counterparts to engage in physically aggressive acts ($d = 9.63$), when measured across a variety of reporters.

The effects of exposure to violence may also differ based on the age of the child or adolescent. Tisak and colleagues (2011) have found that older adolescents tend to witness more violent acts than younger adolescents. Older adolescents tend to have more freedom to move in their communities unsupervised, which may contribute to their being at greater risk for exposure to violence in the community. At the same time, a meta-analytic review demonstrated that exposure to violence is more closely associated with increases in aggressive behavior among adolescents than among younger children (Fowler, et al., 2009). The current study surveyed participants with an average age of 15 years (i.e., the peak age of aggressive behaviors). I hypothesize that older participants (e.g., high school students) will report higher levels of aggression than their younger (e.g., middle school students) counterparts. To the best of my knowledge, only one meta-analysis has examined the moderating role that age may have on the relation between exposure to violence and aggression. Therefore, I will investigate the moderating nature of age on exposure to community violence and aggression. Older adolescents
have had more years to accumulate exposures to violence, as well as to develop aggressive schemas associated with exposure to violence. I hypothesize that as age increases, the strength of the relation between exposure to community violence and aggression will become stronger.

Although past literature has examined and found an effect of friendship conflict on negative behavioral outcomes, such as aggression, no study, to the best of my knowledge, has investigated the effects of friendship conflict among adolescents who have also been exposed to violence. Therefore, the current study intends to further a more nuanced understanding of the cumulative effects of these risk factors by looking at the potential effect of friendship conflict on the relationship between exposure to violence and aggression. It seems plausible that an adolescent who is involved in conflict with a friend would be devoting much of his or her cognitive resources to the rift in the relationship. This devotion could then limit remaining cognitive resources for coping with additional stressors such as exposure to community violence, and lead to an increase in maladaptive coping strategies such as engaging in aggressive behaviors.
CURRENT STUDY

There is an extant body of literature that has examined the relation of deviant peer groups to aggression and exposure to violence. However, there are very few studies that have examined the effect that a friendship may have on aggression among adolescents who have been exposed to violence. For instance, there has only been one study that investigated the moderating effect of peer support (Scarpa & Haden, 2006) and no studies, to the best of my knowledge, examining the effect of conflict in friendships on the relationship between exposure to violence and aggression. The overarching goal of the proposed study was to examine the relation between community violence exposure and reported aggression. Next, the current study investigated the potential moderating effect of a conflict within a close friendship on aggression. In keeping with a model of cumulative risk, adolescents who report high levels of exposure to violence and high levels of conflict within his or her friendship were expected to also report higher levels of aggression than adolescents who did not report high levels of both exposure and conflict. Last, the role of adolescent gender and age were examined regarding exposure to violence, friendship conflict, and aggression. These research questions were investigated using a sample of young men and women in 5th to 12th grades. This age group was chosen because during adolescence, friendships become more important to the learning process of socialization, and friendship conflicts may be expected to be more salient than to younger or older individuals. Additionally, this population was chosen because aggressive behavior has been found to peak during this developmental time period (Williams, Conger, & Blozis, 2007; Winstok & Perkis, 2008). Further, adolescents were chosen to participate due to their increased levels of freedom and decreased levels of supervision, which could lead to higher rates of exposure to community violence. Last, this population was chosen due to the low income urban area in which the
participants reside and the past literature indicating lower income as a risk factor for higher levels of exposure to violence and aggression.

Based on prior research, specific hypothesis were generated:

**Hypothesis 1:** Overall, males will report higher levels of aggression than females.

**Hypothesis 2:** Males will report higher levels of exposure to community violence than females.

**Hypothesis 3:** Older adolescents will report higher levels of aggression than younger adolescents.

**Hypothesis 4:** Older adolescents will report higher levels of exposure to violence than younger adolescents.

**Hypothesis 5:** Greater exposure to violence will be associated with higher levels of aggression.

**Hypothesis 6:** A higher level of conflict in a friendship will be associated with a higher level of self-reported aggression.

**Hypothesis 7:** Conflict within a friendship will moderate the relation between aggression and exposure to violence, such that the association between exposure to violence and aggression will be stronger among those youth who are experiencing higher levels of friendship conflict.

**Hypothesis 8:** Gender will moderate the relation between aggression and exposure to community violence, such that the association between exposure to violence and aggression will be stronger for females than males.
**Hypothesis 9:** Age will moderate the relation between aggression and exposure to community violence, such that older adolescents will report a stronger association between exposure to community violence and aggression than younger adolescents.
METHOD

Participants

Participants are 164 adolescents, 67 males and 94 females (three participants did not identify gender), currently attending high school ($n = 117$) or middle school ($n = 38$; 9 participants did not report grade level). The mean age of participants is 15.29 years ($SD = 2.07$ years), and ranged from 9 to 19 years old. Students were recruited from community organizations (i.e., YMCA Youth Opportunities Program $n = 41$, YWCA Teen Outreach Program $n = 40$, East Toledo Family Center $n = 34$, Adelante $n = 28$, Upward Bound $n = 19$). Two students did not report the program in which they participated. All community organizations served primarily low-income adolescents, therefore it is expected that most participants come from low-income families. See Appendix A for a brief explanation of each organization in the Toledo, Ohio area. The majority of the parents are employed; however, 31% of the participants’ parents were unemployed at the time of data collection. 42% of participants identified their race as African American, 31% as multi-racial, 16% Caucasian, 24% Hispanic, 1% Asian or Pacific Islander, and 5% “other” (See Appendix B for demographic questionnaire). 

Measures

Exposure to community violence

The *Survey of Children’s Exposure to Community Violence* (SCECV; Richters & Saltzman, 1990; See Appendix C) assessed the frequency with which participants have been directly (e.g. victims) and indirectly (e.g. witnessed, heard about) exposed to 18 different forms of violence, not including exposure to media violence. Examples of types of violence assessed included physical assault, threats of physical harm, sexual assault, and witnessing drug dealing. Responses to the items were rated on a nine-point Likert scale ($1 = \text{never}, 9 = \text{almost every day}$).
and assessed the frequency of direct victimization (e.g., “How many times have you yourself been chased by gangs or individuals?”) and witnessing (e.g., “How many times have you seen someone else get chased by gangs or older kids?”) a violent act. Because these variables were highly skewed, they were recoded to a three-point scale (0 = never, 1 = 1 or 2 times, 2 = 3 or more times; Guterman, Hahn, & Cameron, 2002). Each variable consisted of 18 items and have been summed to obtain a total score by violence type. Internal consistencies were strong for total exposure (α = .94), direct victimization (α = .84), and witnessing violence (α = .91).

Aggression

The Youth Self Report—Aggression subscale (YSR; Achenbach, 1991; See Appendix D) was used to examine aggression levels in participants. This self-report measure has assessed aggression in 11 to 18 year olds. Responses to the 17-item subscale were rated on a three-point Likert scale (0 = not true, 2 = very true or often true) and referred to present symptoms in the previous six months. The YSR has been found to have good reliability and validity and has been normed on a representative sample of youth based on age, gender, SES, and ethnicity (Summerville, Kaslow, Abbate, & Cronan, 1994). Strong internal consistency was found for the current sample (α = .79).

Friendship conflict

The Network of Relationships Inventory (NRI; Furman & Buhrmester, 1985; See Appendix E) was used to assess specific dimensions of the participant’s friendship with his/her “most important” friend. The measure consists of 10 friendship dimensions including companionship, conflict, instrumental aid, antagonism, intimacy, nurturance, affection, admiration, relative power, and reliable alliance. Responses to the 30 items are rated on a five-point Likert scale (1 = little or none, 5 = the most) and load onto two factors. The Social Support
factor is the sum of the companionship, instrumental aid, intimacy, nurturance, affection, admiration, and reliable alliance scores, and represents an overview of positive friendship quality. The Negative Interactions factor (e.g., friendship conflict factor) is the sum of the conflict and antagonism items (6 items), and represents a summary of negative interactions with the friend. For purposes of this study, only the friendship conflict factor will be examined. Strong internal consistency was found for all items on the conflict scale ($\alpha = .88$).

**Procedure**

Parents of potential participants were contacted through a consent letter sent home with the student (See Appendix F). Consent forms were asked to be returned indicating that the student was given permission to participate. Potential participants were given at minimum a two-week period to return the consent forms. For those students who did not return consent forms within a two-week period, forms were mailed to the parent via United States Postal Service. Adolescents with parental permission were asked to then give their assent before administration began. Specifically, students had the study, including the risks and benefits, explained to them verbally and in written form (e.g., the study is anonymous, a five dollar gift card would be given to them if they decide to participate even if they decide to stop answering questions). Initially, students were not offered a five dollar gift card as an incentive for completing the survey. However, due to low return rates, the author was given permission to offer a five dollar gift card in raffle form to groups of students (one gift card raffled for every 10 participants in the group) after they participated. Participation continued to be low ($n = 37$). Therefore, the author was granted permission to offer each participant a five dollar gift card after completing the survey ($n = 71$). Due to the lack of returned parental consents, the office of research compliance approved a waiver of parental consent in June, 2011. After that date, parents were mailed a letter home and
given the choice to notify the researchers or their child’s program contact if they did not want their child to participate. If the parental consent was granted (actively or passively, depending on the time of data collection), the gift card incentive was explained to all participants based on the permission granted to the author during the date of the data collection. They were given a chance to ask questions about the study. If they chose to participate, they were asked to sign the written assent form (See Appendix G). In order to preserve anonymity, all participants were given manila file folders to use to prop up and shield answers from other participants. All surveys and consent forms that were collected were stored in a locked filing cabinet. Those participants who gave consent were then verbally administered the questionnaires (NRI, YSR, SCECV, and demographics information) in a group setting in a room provided by the community organization. Although each question was read aloud to all students, each participant circled their answers to each item on their own. All procedures were approved by the Bowling Green State University Human Subjects Review Board (project #H10O198GFB).
RESULTS

Before conducting analyses, outliers were identified and trimmed. During this process, one outlier (3 standard deviations from the mean) for aggression and two for friend conflict were found overall. Rather than deleting them, they were assigned values that were one point higher than the last data point in the normal curve. The outcome variable, aggression, was assessed for skew and kurtosis before conducting hierarchical regressions. Skew was considered significant if the skew statistic divided by the standard error was ± 1.96, with the same criteria applied for kurtosis. Aggression was not significantly skewed nor kurtotic, and therefore not transformed.

Analyses of Variance

To investigate Hypotheses 1 and 2, Analyses of Variance (ANOVAs) were conducted to examine mean differences by gender and race on direct victimization, witnessing violence, friendship conflict, and aggression. Tukey’s post-hoc test was used to probe significant differences found for race. A significant difference was found by gender for direct victimization (Table 1). That is, males reported higher levels of direct victimization than females. No other significant differences were found for gender (Table 1).

Regarding race, a significant difference was found where participants who identified as Caucasian reported fewer instances of direct victimization than participants who identified as African American (Table 2). Significant differences were also found for reports of witnessing violence. That is, Caucasian participants reported fewer instances of witnessing violence than African American and Multi-Racial students (Table 2). African American participants reported higher levels of friendship conflict than Caucasian and Latino/Hispanic participants. No significant differences were found for aggression by race (Table 2). Race was not included as a
covariate in regression equations because it was not significantly associated with the outcome variable, and its correlations with other predictors could lead to problems with multicollinearity.

Correlational Analyses

As an initial test of Hypotheses 3, 4, 5, and 6, correlations were conducted to investigate bivariate relations between age, both types of exposure to community violence (e.g., victimization, witnessing), friendship conflict, and aggression (Table 3). Direct victimization and witnessing violence were strongly correlated ($r = .82$). Further, age was significantly positively correlated with both direct victimization and witnessing violence. That is, older adolescents reported higher rates of direct victimization and witnessing violence than younger adolescents, partially supporting Hypothesis 4; however, age was not associated with levels of aggression, contradictory to Hypothesis 3. Aggression was found to positively correlate with both measures of exposure to community violence as well as with friendship conflict. That is, as the degree of exposure to community violence and friendship conflict increases, so too does self-reported aggression, supporting Hypotheses 5 and 6.

Regression Analyses

Hierarchical multiple regression was used to test whether bivariate effects remained in the presence of other variables, and to test moderation effects proposed in Hypotheses 7-9. As direct exposure and witnessing community violence are conceptually distinct and may be expected to have different patterns of prediction, they were examined in separate regression models. A total of four regression models were conducted, to separately examine whether age and gender might moderate the effects of direct victimization and witnessing community violence on aggression.
**Gender.** In order to assess Hypotheses 5, 7, and 8, a hierarchical regression was conducted to test a model with friendship conflict and gender as moderators of the relation between direct victimization and aggression. Gender, age, friendship conflict, and victimization were entered into the first step. Interaction variables between gender and victimization as well as friendship conflict and victimization were entered into the second step. A three-way interaction term between gender, victimization, and friendship conflict was entered into the third step.

Significant main effects emerged for gender, direct victimization, and friendship conflict (Table 4). The main effect for age was initially non-significant, but became significant in the third step when all interaction terms were entered. A significant interaction was found between gender and direct victimization (Table 4). The interaction term between victimization and friendship conflict was nonsignificant (Table 4), and the three-way interaction term between gender, friendship conflict, and victimization was also nonsignificant. Separate models were run with conditional values for males and females to probe differences in the slope of exposure to violence by aggression (Holmbeck, 2002). This post-hoc probing revealed that females demonstrated a stronger association between direct victimization and externalizing than did males (Figure 1).

Continuing to test Hypotheses 5, 7, and 8, a second hierarchical regression model tested the same model only for witnessing violence, rather than for direct victimization. Witnessing violence, gender, age, and friendship conflict were entered into the first step. Interaction terms between gender and witnessing violence as well as friendship conflict and witnessing violence were entered into the second step. In the third step, a three-way interaction term was entered between gender, friendship conflict, and witnessing violence.
Significant main effects for witnessed violence, age, gender, and friendship conflict were found, but gender did not significantly predict aggression in the presence of other main effects (Table 4). All interaction terms were found to be nonsignificant (Table 4). While the interaction between gender and witnessed violence was not significant, the addition of this interaction term reduced the significance of the main effect of witnessed violence. This suggests that despite this interaction term not reaching statistical significance, controlling for the moderation of witnessed violence by gender reduces the variance attributable to the overall effects of witnessed violence.

**Age.** In order to assess Hypothesis 9, a hierarchical regression was conducted to test the model with friendship conflict and age as a moderator between direct victimization and aggression. Age, friendship conflict, gender, and victimization were entered into the first step. Interaction terms for age by victimization as well as friendship conflict by victimization were entered into the second step. A three-way interaction term between age, victimization, and friendship conflict was entered into the third step.

Main effects for friendship conflict, gender, and direct victimization were significant when initially entered but did not emerge for age (Table 5). However, when interaction terms were entered in the second step, the main effect for age became significant. All interaction terms were nonsignificant; however, the addition of interaction terms increased the strength of the main effect of age to reach statistical significance. This suggests that the interaction term of age by direct victimization likely served as a suppressor variable due to the positive bivariate correlation between age and victimization, strengthening both main effects when this association was controlled through the inclusion of an interaction term.

In a continued examination of Hypothesis 9, a second hierarchical regression model was conducted to test the same model only for witnessing violence, rather than for direct
victimization. Age, gender, witnessing violence, and friendship conflict were entered into the first step. Interaction terms between age and witnessing violence as well as friendship conflict and witnessing violence were entered into the second step. In the third step, a three-way interaction term was entered between age, friendship conflict, and witnessing violence.

Significant main effects emerged for friendship conflict and witnessing violence (Table 5). When interaction terms were entered in the second step, main effects of friendship conflict became non-significant. The main effects for age and gender and all interaction terms were found to be nonsignificant (Table 5).
Although a significant amount of research has investigated the mental health outcomes of a single risk factor, less attention has historically been given to the cumulative effects of several risk factors on a single outcome (Aro, et al., 2009). The current study examined potential moderators of the relation between exposure to community violence and aggression. While most hypothesized interactions were non-significant, my findings indicate that females demonstrate a stronger association between direct victimization and aggression than males. To the best of my knowledge, only two prior studies have examined this relation. Specifically, Farrell and Bruce (1997) found similar effects in a sample of middle school students, with females demonstrating a stronger association between exposure to community violence and aggression than males. Additionally, Calvete and Orue (2013) investigated this relation but rather than exposure to community violence, examined family violence exposure. They posited that females demonstrated a greater impact of exposure to violence on aggression due to females being more vulnerable to dysfunctions, and/or the different socialization processes of males and females. Specifically, females are socialized to be highly influenced by interpersonal relations. Therefore, if a female is directly exposed to violence against a friend or loved one, she may have a sense of obligation to fight back in honor of her friend. From the perspective of the Social Information Processing model, this tendency to react strongly to perceived violence against a loved one may increase the likelihood that a girl will select an aggressive response. This reaction can become automatic after witnessing or being a part of several similar situations. Based on the findings in this study, females who are directly victimized may be exhibiting higher levels of aggression than those who have experienced a lower level of direct victimization due to this learned and automatic response. In terms of extending the cumulative risk model, this moderation by gender
is an instance of the effects of one risk factor for aggression depending on the level of another risk factor. It is important to highlight the interactive nature of the relationship between these variables; in an additive model, one would expect being male and exposed to community violence would contribute to the greatest risk, as each variable alone is associated with aggression. Instead we find that when examining risk factors together, in this case it is females who appear to be more affected by exposure to community violence. While one meta-analysis failed to find that gender moderated the effects of exposure to community violence, the authors acknowledged methodological limitations may have reduced their ability to find effects for gender (Fowler et al., 2009). Therefore, the moderation findings of this study should be replicated in future research.

Despite the lack of evidence for moderating effects of friendship conflict on exposure to community violence, I did find main effects for friendship conflict. These findings are consistent with past literature noting that aggression may be used by children and adolescents as a strategy for coping with peer conflict (Cillessen, et al., 2005; Quigley, et al., 2006; Scarpa & Haden, 2006). Although this study did not specifically investigate coping strategies, this may be a plausible explanation for the current findings. The findings from Fowler and colleagues’ (2009) meta-analytic review indicated a large effect size relating externalizing symptoms and exposure to community violence \( (d = .63, p \leq .01) \) and adolescents reporting higher levels of lifetime exposure to violence \( (d = .98, p \leq .001) \) than children. The results of this study are congruent with these findings on the effects of exposure to community violence on aggression, but did not find a consistent main effect of age on aggression. It is possible that by not including very young children, this normative increase in aggression was not captured. It is also possible that within the restricted age range in the current sample, aggression follows more of a curvilinear pattern;
the current study lacked the sample size to explore both curvilinear effects as well as interaction terms, but future studies may incorporate a quadratic term for age. However, this study was consistent with existing literature finding that older adolescents tend to report higher levels of exposure to community violence and aggression than younger adolescents, likely due to their greater freedom to move about their neighborhoods unsupervised (Fowler et al., 2009; Tisak et al., 2011).

Although many of the study’s hypotheses were confirmed, some were not. For instance, I did not find that conflict within friendships moderated the relation between aggression and exposure to violence. Although friendship conflict does have an effect on adolescents’ self-reported aggression, this effect was independent of the effects of exposure to community violence. Conflict within a friendship does not appear to worsen the effects of other stressors, suggesting that despite the importance of friends during adolescence, the stress associated with conflict within a friendship does not reduce the ability of an adolescent to cope with exposure to community violence. Similarly, despite the relation found between exposure to community violence and age, I did not find that age moderated the relation between aggression and exposure to community violence. As noted previously, however, my findings for age may have been constrained by using only an adolescent sample and/or by using only a linear term for age. Somewhat surprisingly, we did not find a significant gender difference in mean levels of aggression. The lack of differences could be due to the measure used to assess aggression. Specifically, the YSR is a general measure of aggression and does not individually assess physical or relational aggression enough to create separate subscales; by conflating these subscales the measure may obscure true gender differences. Future research should investigate a wider age range than included in this study, to examine potential differences between middle
childhood and late adolescence, as well as include varying types of aggression to gain a better understanding of the relation between exposure to community violence and aggression on gender and age.

Among the strengths of this study were the population sampled, size of the sample, and investigation of moderating factors between exposure to community violence and aggression. Specifically, the sample was comprised of adolescents who lived in low-income areas of an urban community. This sample consisted of 164 students, a much larger cross-sectional community sample than previous studies conducted with similar populations (Boxer, et al., 2008; McMahon, et al., 2009). Further, the data was collected from a sample of adolescents attending community organizations rather than a school sample. This is a strength of the study, as I was able to collect a potentially larger age-range to compare developmental levels of younger and older adolescents, and greater diversity may have been obtained than in the school-based samples traditionally used in similar studies. Last, this study was able to uniquely contribute to the literature by examining three different potential moderating effects between aggression and exposure to community violence: friendship conflict, gender, and age.

Although there were many strengths of this study, there were also limitations. For instance, this study was limited to self-reported, cross-sectional data. Moreover, there were most likely many other stressors that contributed to the increased level of self-reported aggression and exposure to violence such as inter-parental conflict, single parent households, physical and psychological stressors, as well as social consequences. Including some of these other variables likely would have increased the predictive power of my regression models, but due to time and sample size constraints I needed to limit the number of variables examined. Another limitation of this study was the measures used. Specifically, the Youth Self-Report (YSR) aggression
measure and the Network of Relationships Inventory (NRI) friendship conflict measure had items that may have overlapped. One item on the YSR says, “I argue a lot.” A similar item on the NRI asks, “How much do you and this person argue with one another?” These overlapping items could have contributed to the significant correlation between friendship conflict and aggression. Future studies should consider using a different measure of aggression that can contribute to a better understanding of this relation in terms of physical and relational aggression. Additionally, the general community violence measure could be considered a limitation. Specifically, community violence encompasses school, family, and neighborhood violence. Therefore, it is impossible to draw conclusions about different effects of the varying environments in which the participants are experiencing violence. Future research should examine moderating relations within the general umbrella of “community” to gain a better understanding of experiences of violence in different environments. Last, I was unable to collect data from a control group (adolescents who did not attend an after school program). It is possible that adolescents who attend after school programs are more resilient than other adolescents because these programs typically screen out students who are seriously disruptive, which may make my findings less generalizable to the general population of adolescents. Future studies may address these limitations by longitudinally investigating exposure to community violence starting in early adolescence and following the sample into adulthood. Limitations could also be addressed by asking parents or teachers to report on participants’ behaviors and environment.

Perhaps the most important finding of this study is that exposure to community violence is associated with greater risk for aggression, and that this risk may be even higher among adolescent girls. Teachers, community organizers, and parents are likely already aware that exposure to community violence can negatively affect adolescents, but may not be as aware of
the possible impact on increasing aggression. These caring adults should be aware that adolescents who are directly victimized or witness community violence may also be exhibiting more aggression than adolescents who are not exposed. Further, girls may be at a higher risk for exhibiting aggression if they have also been directly victimized. Therefore, future research should examine the processes that increase risk for girls, and consider how to tailor prevention programs to meet the needs of adolescent girls at risk for aggression.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Male</th>
<th>Mean Female</th>
<th>Standard Deviation Male</th>
<th>Standard Deviation Female</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression</td>
<td>7.43</td>
<td>8.39</td>
<td>4.76</td>
<td>5.55</td>
<td>1.32</td>
</tr>
<tr>
<td>Direct ECV</td>
<td>11.30</td>
<td>9.01</td>
<td>7.83</td>
<td>6.03</td>
<td>5.37*</td>
</tr>
<tr>
<td>Witness ECV</td>
<td>15.15</td>
<td>14.76</td>
<td>8.75</td>
<td>7.72</td>
<td>.11</td>
</tr>
<tr>
<td>Friend Conflict</td>
<td>10.47</td>
<td>10.44</td>
<td>4.80</td>
<td>4.78</td>
<td>.00</td>
</tr>
</tbody>
</table>

* p < .05
### TABLE 2

MEANS AND STANDARD DEVIATIONS BY RACE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Caucasian</th>
<th>African American</th>
<th>Hispanic</th>
<th>Multi-Racial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean  SD</td>
<td>Mean  SD</td>
<td>Mean  SD</td>
<td>Mean  SD</td>
</tr>
<tr>
<td>Aggression</td>
<td>7.50 5.98</td>
<td>9.16 5.72</td>
<td>6.00 3.55</td>
<td>7.94 4.77</td>
</tr>
<tr>
<td>Direct ECV</td>
<td>5.85 b 6.02</td>
<td>11.35 a 6.24</td>
<td>8.13 a,b 5.14</td>
<td>10.34 a 7.09</td>
</tr>
<tr>
<td>Witness ECV</td>
<td>8.54 b 8.36</td>
<td>16.80 a 7.00</td>
<td>12.38 a,b 7.31</td>
<td>16.17 a 7.90</td>
</tr>
<tr>
<td>Friend Conflict</td>
<td>8.27 b 3.08</td>
<td>11.70 a 5.03</td>
<td>8.21 b 4.27</td>
<td>10.54 a 4.31</td>
</tr>
</tbody>
</table>

*Note.* Different subscripts indicate a significant difference from each other based on Tukey’s post-hoc analyses.

**p < .01; ***p < .001
TABLE 3

INTERCORRELATIONS BETWEEN DIRECT AND WITNESSING COMMUNITY VIOLENCE, AGGRESSION, FRIEND CONFLICT, AND AGE

<table>
<thead>
<tr>
<th>Subscale</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>--</td>
<td>.07</td>
<td>.44**</td>
<td>.46**</td>
<td>.09</td>
</tr>
<tr>
<td>2. Aggression</td>
<td>--</td>
<td>.35**</td>
<td>.31**</td>
<td>.28**</td>
<td></td>
</tr>
<tr>
<td>3. ECV Direct</td>
<td>--</td>
<td></td>
<td>.82**</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>4. ECV Witness</td>
<td>--</td>
<td></td>
<td></td>
<td>.15*</td>
<td></td>
</tr>
<tr>
<td>5. Friend Conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>15.53</td>
<td>7.97</td>
<td>9.98</td>
<td>14.87</td>
<td>10.40</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.05</td>
<td>5.20</td>
<td>6.90</td>
<td>8.13</td>
<td>4.76</td>
</tr>
</tbody>
</table>

** p < .01
TABLE 4

GENDER AND FRIEND CONFLICT PREDICTING AGGRESSION IN ADOLESCENTS EXPOSED TO COMMUNITY VIOLENCE

<table>
<thead>
<tr>
<th></th>
<th>Direct Victimization</th>
<th>Witnessed Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>ΔR²</td>
</tr>
<tr>
<td>1. Gender</td>
<td>.18*</td>
<td>.22</td>
</tr>
<tr>
<td>Age</td>
<td>-.17</td>
<td></td>
</tr>
<tr>
<td>Friendship Conflict</td>
<td>.21**</td>
<td></td>
</tr>
<tr>
<td>Exposure to Comm. Violence</td>
<td>.43***</td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>.19*</td>
<td>.04</td>
</tr>
<tr>
<td>Age</td>
<td>-.17</td>
<td></td>
</tr>
<tr>
<td>Friendship Conflict</td>
<td>.32*</td>
<td></td>
</tr>
<tr>
<td>Exposure to Comm. Violence</td>
<td>.46*</td>
<td></td>
</tr>
<tr>
<td>Gender x ECV</td>
<td>.23*</td>
<td></td>
</tr>
<tr>
<td>Friend Conflict x ECV</td>
<td>-.24</td>
<td></td>
</tr>
<tr>
<td>3. Gender</td>
<td>.20*</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td>-.17*</td>
<td></td>
</tr>
<tr>
<td>Friendship Conflict</td>
<td>.24**</td>
<td></td>
</tr>
<tr>
<td>Exposure to Comm. Violence</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td>Gender x ECV</td>
<td>.23*</td>
<td></td>
</tr>
<tr>
<td>Friend Conflict x ECV</td>
<td>-.10</td>
<td></td>
</tr>
<tr>
<td>Gender x Conflict x ECV</td>
<td>-.10</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05; **p < .01; ***p < .001
TABLE 5

AGE AND FRIEND CONFLICT PREDICTING AGGRESSION IN ADOLESCENTS EXPOSED TO COMMUNITY VIOLENCE

<table>
<thead>
<tr>
<th></th>
<th>Direct Victimization</th>
<th>Witnessed Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>ΔR²</td>
</tr>
<tr>
<td>1. Age</td>
<td>-.17</td>
<td>.22</td>
</tr>
<tr>
<td>Gender</td>
<td>.18*</td>
<td></td>
</tr>
<tr>
<td>Friendship Conflict</td>
<td>.21**</td>
<td></td>
</tr>
<tr>
<td>Exposure to Comm. Violence</td>
<td>.43***</td>
<td></td>
</tr>
<tr>
<td>2. Age</td>
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<td>.02</td>
</tr>
<tr>
<td>Gender</td>
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</tr>
<tr>
<td>Friendship Conflict</td>
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<td></td>
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<tr>
<td>Exposure to Comm. Violence</td>
<td>.74***</td>
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<tr>
<td>Age x ECV</td>
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<tr>
<td>Friend Conflict x ECV</td>
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<td>3. Age</td>
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<tr>
<td>Gender</td>
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<td>Exposure to Comm. Violence</td>
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<td>Age x ECV</td>
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<td>Friend Conflict x ECV</td>
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<tr>
<td>Age x Conflict x ECV</td>
<td>.05</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001
FIGURE 1

THE MODERATING RELATION OF GENDER ON EXPOSURE TO COMMUNITY VIOLENCE AND AGGRESSION
REFERENCES


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APPENDIX A: DESCRIPTION OF PARTICIPATING PROGRAMS

YMCA Youth Opportunities Program (YOP): This year-round program is designed for low income youth who live in Lucas County. The 14-18 year old high school participants are offered tutoring during the school year. Throughout the year, the youth are offered work experience and leadership development that involves community service learning projects. Additionally, all families of the youth are given supportive services such as clothing and childcare assistance and transportation to and from work sites. All participants have an adult mentor who leads each specific YOP site and are provided with tutoring from a Toledo Public School employee. This program allows students to stay off the streets after school and during the summer and learn life skills that allow them to proceed with education and/or work-related activities in the future.

YWCA Teen Outreach Program (TOP): TOP is an after school and summer program offered to low-income students in the greater Toledo, OH area. Participants meet weekly to discuss life skills, values, relationships, and other adolescent concerns. Further, this program offers chances to make a difference in their neighborhoods through community service activities. The goal of the program is to help give youth knowledge of resources in their community and the motivation and ability to achieve life-long ambitions.

East Toledo Family Center (ETFC): The East Toledo Family Center is an organization that offers several different programs to local areas adolescents for the past 110 years. Specifically, they offer not only tutoring and after school programming, but also basketball, baseball, cheerleading, soccer, and golf to Toledo youth.

Upward Bound (UB): Upward Bound is a program for low-income youth who could become first generation college students. The students are required to be currently attending high school and have not have a parent with a bachelor’s degree. UB offers an overnight summer program based at a local university (University of Toledo, Bowling Green State University). The goal of this program is to increase attendance and graduation rates of participants in postsecondary establishments. Students attend classes throughout the week. At the end of the summer, participants who completed the program are taken to a large city in the United States to tour colleges in that area. Past trips have included New York City and Atlanta.

Adelante: Adelante is a non-profit organization reaching out to the Latino community and others in the greater Toledo, OH area. They focus on empowering individuals through education, prevention, health and other services. Participants from the current study were enrolled in “Ganas,” an after school program that reaches out to high school and middle school students. This program provides time to help students with daily homework assignments and life skills training by an adult mentor. Additionally, the program offers transportation back to the participants homes after the program has commenced for the day. Last, this program offers youth opportunities that they may otherwise be unable to experience such as group field trips to art museums and community service opportunities.
APPENDIX B: DEMOGRAPHIC QUESTIONNAIRE

1. What is your date of birth? _________________________________

2. What gender are you?
   a. male
   b. female

3. What is your ethnicity?
   a. Caucasian
   b. African American
   c. Asian or Pacific Islander
   d. Latino/a or Hispanic
   e. Native American or Alaskan Native
   f. Multi-racial
   g. Other

4. Do you remember the North End Riots in Toledo? YES NO
   If yes, were you directly involved? YES NO

5. Are you attending an after-school program? YES NO
   If yes, What program are you attending? (circle as many as you are attending)
     a. TOP
     b. Positive Choices
     c. Other (please write in) ____________________________________________

6. Are you currently attending school? YES NO
   If yes, What grade are you in?
     a. 5th grade or lower
     b. 6th grade to 8th grade
     c. 9th grade to 12th grade

7. Is/Are your legal guardian(s) currently employed? YES NO
   If yes, please identify your guardian(s) job:
   Legal guardian 1: ___________________________________________________
   Legal guardian 2: ___________________________________________________

8. Is/are your legal guardian(s) your (circle as many as apply):
   a. mother
   b. father
   c. stepmother
   d. stepfather
   e. grandparent
   f. other (please write in)__________________________________________
APPENDIX C: SCECV (RICHTERS & SALTZMAN, 1990)

Listed below are various kinds of violence and things related to violence that you may have experienced. For each question, circle the letter that best describes your experience. **DO NOT INCLUDE IN YOUR ANSWERS THINGS YOU MAY HAVE SEEN OR HEARD ABOUT ONLY ON TV, RADIO, THE NEWS, OR IN THE MOVIES.** Do not write your name anywhere on this form. This is a confidential survey. No one will know that these are your answers.

**Being Chased**

1. How many times have you *yourself* been chased by gangs or individuals? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

2. How many times have you *seen someone else* get chased by gangs or older kids? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

3. How many times have you *only heard about* someone being chased by gangs or older kids? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

**Drug Activity**

4. How many times have you *seen other people* using or selling illegal drugs? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

5. How many times have you *yourself* actually been asked to get involved in any aspect of selling or distributing illegal drugs? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day
6. How many times have you *yourself* actually been asked to use illegal drugs? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

7. How many times have you *seen someone else* being asked to get involved in any aspect of selling or distributing illegal drugs? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

8. How many times have you *only heard about* someone else being asked to get involved in any aspect of selling or distributing illegal drugs? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

**Serious Accidents**

*9. How many times have you *yourself* actually been in a serious accident where you thought that you or someone else would get hurt very badly or die? (circle only one)*

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

*10. How many times have you *seen someone else* have a serious accident where you thought that the person would get hurt very badly or die? (circle only one)*

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

*11. How many times have you *only heard about* someone else having a serious accident where you thought the person could have been very badly hurt or died? (circle only one)*

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day
Forced Entry

12. How many times have you yourself been at a home when someone has broken into or tried to force their way into your home?  (circle only one)

(a) never   (d) 3 or 4 times   (g) at least once a month
(b) 1 time   (e) 5 or 6 times   (h) at least once a week
(c) 2 times   (f) 7 or 8 times   (i) almost every day

13. How many times has your house been broken into when you weren’t home? (circle only one)

(a) never   (d) 3 or 4 times   (g) at least once a month
(b) 1 time   (e) 5 or 6 times   (h) at least once a week
(c) 2 times   (f) 7 or 8 times   (i) almost every day

14. How many times have you seen someone trying to force their way into somebody else’s house or apartment? (circle only one)

(a) never   (d) 3 or 4 times   (g) at least once a month
(b) 1 time   (e) 5 or 6 times   (h) at least once a week
(c) 2 times   (f) 7 or 8 times   (i) almost every day

15. How many times have you only heard about someone trying to force their way into somebody else’s house or apartment? (circle only one)

(a) never   (d) 3 or 4 times   (g) at least once a month
(b) 1 time   (e) 5 or 6 times   (h) at least once a week
(c) 2 times   (f) 7 or 8 times   (i) almost every day

Arrests

16. How many times have you yourself actually been picked-up, arrested, or taken away by the police? (circle only one)

(a) never   (d) 3 or 4 times   (g) at least once a month
(b) 1 time   (e) 5 or 6 times   (h) at least once a week
(c) 2 times   (f) 7 or 8 times   (i) almost every day

17. How many times have you seen someone else being picked up, arrested, or taken away by the police?  (circle only one)

(a) never   (d) 3 or 4 times   (g) at least once a month
(b) 1 time   (e) 5 or 6 times   (h) at least once a week
(c) 2 times   (f) 7 or 8 times   (i) almost every day
18. How many times have you only heard about someone else being picked-up, arrested, or taken away by the police? (circle only one)

(a) never  (d) 3 or 4 times  (g) at least once a month
(b) 1 time  (e) 5 or 6 times  (h) at least once a week
(c) 2 times  (f) 7 or 8 times  (i) almost every day

19. How many times have you yourself actually been threatened with serious physical harm by someone? (circle only one)

(a) never  (d) 3 or 4 times  (g) at least once a month
(b) 1 time  (e) 5 or 6 times  (h) at least once a week
(c) 2 times  (f) 7 or 8 times  (i) almost every day

20. How many times have you seen someone else being threatened with serious physical harm? (circle only one)

(a) never  (d) 3 or 4 times  (g) at least once a month
(b) 1 time  (e) 5 or 6 times  (h) at least once a week
(c) 2 times  (f) 7 or 8 times  (i) almost every day

21. How many times have you only heard about someone else being threatened with serious physical harm? (circle only one)

(a) never  (d) 3 or 4 times  (g) at least once a month
(b) 1 time  (e) 5 or 6 times  (h) at least once a week
(c) 2 times  (f) 7 or 8 times  (i) almost every day

22. How many times have you yourself actually been slapped, punched, or hit by someone? (circle only one)

(a) never  (d) 3 or 4 times  (g) at least once a month
(b) 1 time  (e) 5 or 6 times  (h) at least once a week
(c) 2 times  (f) 7 or 8 times  (i) almost every day

Who did this? (What was the person’s relationship to you?) (circle one or more)

(a) adult stranger  (d) young stranger  (g) parent(s)  (j) don’t know
(b) adult acquaintance  (e) young acquaintance  (h) brother/sister
(c) adult friend  (f) young friend  (i) other relative
23. How many times have you seen someone else being slapped, punched or hit by a member of their family? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

24. How many times have you only heard about someone else being slapped, punched, or hit by a member of their family? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

25. How many times have you seen another person getting slapped, punched, or hit by someone who was not a member of their family? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

26. How many times have you only heard about someone else getting slapped, punched or hit by a person who was not a member of their own family? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

Beatings and Muggings

27. How many times have you yourself actually been beaten up, robbed, or mugged? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

28. How many times have you seen someone else getting beaten up, robbed, or mugged? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day
29. How many times have you only heard about someone else being beaten up, robbed, or mugged? (circle only one)

(a) never    (d) 3 or 4 times    (g) at least once a month
(b) 1 time   (e) 5 or 6 times    (h) at least once a week
(c) 2 times  (f) 7 or 8 times    (i) almost every day

**Rape and Molestation**

30. How many times have you yourself actually been sexually assaulted, molested, or raped? (circle only one)

(a) never    (d) 3 or 4 times    (g) at least once a month
(b) 1 time   (e) 5 or 6 times    (h) at least once a week
(c) 2 times  (f) 7 or 8 times    (i) almost every day

31. How many times have you seen someone else being sexually assaulted, molested, or raped? (circle only one)

(a) never    (d) 3 or 4 times    (g) at least once a month
(b) 1 time   (e) 5 or 6 times    (h) at least once a week
(c) 2 times  (f) 7 or 8 times    (i) almost every day

32. How many times have you only heard about someone being sexually assaulted, molested, or raped? (circle only one)

(a) never    (d) 3 or 4 times    (g) at least once a month
(b) 1 time   (e) 5 or 6 times    (h) at least once a week
(c) 2 times  (f) 7 or 8 times    (i) almost every day

**Carrying Guns and Knives**

33. How many times have you actually seen someone carrying or holding a gun or knife? (do not include police, military, or security officers) (circle only one)

(a) never    (d) 3 or 4 times    (g) at least once a month
(b) 1 time   (e) 5 or 6 times    (h) at least once a week
(c) 2 times  (f) 7 or 8 times    (i) almost every day

34. How many times have you only heard about someone carrying a gun or knife? (do not include police, military, or security officers) (circle only one)

(a) never    (d) 3 or 4 times    (g) at least once a month
(b) 1 time   (e) 5 or 6 times    (h) at least once a week
(c) 2 times  (f) 7 or 8 times    (i) almost every day
35. How many times have you *yourself* heard the sound of gunfire *outside* when you were in the following settings?

**When in or near the home? (circle one)**

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

**When in or near the school building? (circle one)**

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

36. How many times have you *seen or heard a gun fired in your home*?

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

**Serious Woundings**

37. How many times have you *actually seen* a seriously wounded person after an incidence of violence? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

38. How many times have you *only heard about* a person seriously wounded after an incident of violence? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

**Knife Attacks**

39. How many times have you *yourself* actually been attacked or stabbed with a knife?

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or more times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day
40. How often have you *seen someone else* being attacked or stabbed with a knife? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

41. How many times have you *only heard about* someone else being attacked or stabbed with a knife? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

*Shootings*

42. How many times have you *yourself actually been shot* with a gun? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or more times

43. How often have you *seen someone else* get shot with a gun? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 to 8 times  
(f) at least once a month

44. How many times have you *only heard about* someone else getting shot with a gun? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

*Dead Bodies*

45. How many times have you *actually seen* a dead person somewhere in the community? (do not include wakes and funerals) (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day
46. How many times have you only heard about a dead body somewhere in the community? (do not include wakes and funerals) (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

Suicides

47. How many times have you actually seen someone committing suicide? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

48. How many times have you only heard about someone committing suicide? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

Killings

49. How many times have you actually seen someone being killed by another person? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

50. How many times have you only heard about someone being killed by another person? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day

Other Types of Violence

51. How many times have you been in any kind of situation not already described where you were extremely frightened or thought that you would get hurt very badly or die? (circle only one)

(a) never  
(b) 1 time  
(c) 2 times  
(d) 3 or 4 times  
(e) 5 or 6 times  
(f) 7 or 8 times  
(g) at least once a month  
(h) at least once a week  
(i) almost every day
All Types of Violence Combined

52. How many times have you *yourself* actually been the victim of any type of violence such as those described in this questionnaire?

<table>
<thead>
<tr>
<th></th>
<th>(a) never</th>
<th>(b) 1 time</th>
<th>(c) 2 times</th>
<th>(d) 3 or 4 times</th>
<th>(e) 5 or 6 times</th>
<th>(f) 7 or 8 times</th>
<th>(g) at least once a month</th>
<th>(h) at least once a week</th>
<th>(i) almost every day</th>
</tr>
</thead>
</table>

53. How many times have you *seen someone else* being victimized by some form of violence such as those described in this questionnaire?

<table>
<thead>
<tr>
<th></th>
<th>(a) never</th>
<th>(b) 1 time</th>
<th>(c) 2 times</th>
<th>(d) 3 or 4 times</th>
<th>(e) 5 or 6 times</th>
<th>(f) 7 or 8 times</th>
<th>(g) at least once a month</th>
<th>(h) at least once a week</th>
<th>(i) almost every day</th>
</tr>
</thead>
</table>

54. How many times have you *only heard about* someone else being victimized by some form of violence such as those described in this questionnaire? (circle only one)

<table>
<thead>
<tr>
<th></th>
<th>(a) never</th>
<th>(b) 1 time</th>
<th>(c) 2 times</th>
<th>(d) 3 or 4 times</th>
<th>(e) 5 or 6 times</th>
<th>(f) 7 or 8 times</th>
<th>(g) at least once a month</th>
<th>(h) at least once a week</th>
<th>(i) almost every day</th>
</tr>
</thead>
</table>

* indicates item not included in analyses
### APPENDIX D: YOUTH SELF-REPORT AGGRESSION SUBSCALE

<table>
<thead>
<tr>
<th></th>
<th>Not True</th>
<th>Somewhat or Sometimes True</th>
<th>Very True or Often True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I argue a lot.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. I am mean to others.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. I try to get a lot of attention.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. I destroy my own things.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. I destroy things belonging to others.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. I disobey my parents.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. I disobey at school.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. I get in many fights.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9. I physically attack other people.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10. I scream a lot.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11. I am stubborn.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12. My moods or feelings change suddenly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13. I am suspicious.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14. I tease others a lot.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15. I have a hot temper.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16. I threaten to hurt people.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. I am louder than other kids.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
APPENDIX E: NETWORK OF RELATIONSHIPS INVENTORY

Everyone has a number of people who are important in his or her life. These questions ask about your relationships with your most important friend in high school. Do not choose a sibling.

Friend’s First Name: _________________________________

Now we would like you to answer the following questions about the person you have selected above.

1. *How much does this person teach you how do to things that you don’t know?  

   1 Little or none  2 Somewhat  3 very much  4 extremely much  5 the most

2. *How much do you talk about everything with this person?  

   1 Little or none  2 Somewhat  3 very much  4 extremely much  5 the most

3. *How much do you help this person with things she/he can’t do by her/himself?  

   1 Little or none  2 Somewhat  3 very much  4 extremely much  5 the most

4. *How much does this person like or love you?  

   1 Little or none  2 Somewhat  3 very much  4 extremely much  5 the most

5. *How much does this person treat you like you’re admired and respected?  

   1 Little or none  2 Somewhat  3 very much  4 extremely much  5 the most

6. *How much do you play around and have fun with this person?  

   1 Little or none  2 Somewhat  3 very much  4 extremely much  5 the most

7. *How much does this person help you figure out or fix things?  

   1 Little or none  2 Somewhat  3 very much  4 extremely much  5 the most
8. *How much do you share your secrets and private feelings with this person?*

   1  2  3  4  5
   Little or none  Somewhat  very much  extremely much  the most

9. *How much do you protect and look out for this person?*

   1  2  3  4  5
   Little or none  Somewhat  very much  extremely much  the most

10. *How much does this person really care about you?*

    1  2  3  4  5
    Little or none  Somewhat  very much  extremely much  the most

11. *How much does this person treat you like you’re good at many things?*

    1  2  3  4  5
    Little or none  Somewhat  very much  extremely much  the most

12. *How often do you go places and do enjoyable things with this person?*

    1  2  3  4  5
    Little or none  Somewhat  very much  extremely much  the most

13. *How often does this person help you when you need to get something done?*

    1  2  3  4  5
    Little or none  Somewhat  very much  extremely much  the most

14. *How much do you take care of this person?*

    1  2  3  4  5
    Little or none  Somewhat  very much  extremely much  the most

15. *How much do you and this person have a strong feeling of affection (liking or loving) towards you?*

    1  2  3  4  5
    Little or none  Somewhat  very much  extremely much  the most

16. *How much does this person approve of things you do?*

    1  2  3  4  5
    Little or none  Somewhat  very much  extremely much  the most
17. *How much do you talk to this person about things that you do not want others to know?*

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18. *How much free time do you spend with this person?*

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19. *How sure are you that this relationship will continue in the years to come?*

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20. *How sure are you that your relationship will last in spite of fights?*

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21. *How sure are you that this relationship will last no matter what?*

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22. How much do you and this person get upset with or mad at each other?

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23. How much do you and this person get on each other’s nerves?

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24. *Who tells the other person what to do more often, you or this person?*

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<td>You</td>
<td>Your Friend</td>
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25. How much do you and this person disagree and quarrel?

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26. How much do you and this person get annoyed with each other’s behavior?

1  Little or none                  2  Somewhat                  3  very much                  4  extremely much                  5  the most

27. *Between you and this person, who tends to be the BOSS in this relationship?

1  You                      2  Your Friend                  3  Neither

28. How much do you and this person argue with one another?

1  Little or none                  2  Somewhat                  3  very much                  4  extremely much                  5  the most

29. How much do you and this person nag one another?

1  Little or none                  2  Somewhat                  3  very much                  4  extremely much                  5  the most

30. *In this relationship, who tends to take charge and decide which things get done?

1  You                      2  Your Friend                  3  Neither

* indicates items not included in analyses
Dear Parent/Guardian

Your child has been invited to participate in a research project sponsored by the Department of Psychology at Bowling Green State University. The project is being conducted by Gina Veits, a graduate student, and Carolyn Tompsett, an Assistant Professor. The project is interested in how children who may have been exposed to violence cope with feelings of sadness, anxiety, and anger, and how friendship influences this process.

What will you be asked to do? If you and your child agree that your child can participate, your child will be asked to answer some questions about his or her emotions and behavior. The questionnaire takes about 30 minutes to fill out. Your child will be asked to answer a set of questions about different ways they may have been exposed to violence, including types of violence they may have witnessed or experienced themselves (e.g., sexual assault, killings, suicidal thoughts, illegal drug selling or use). For instance, “How many times have you seen other people using or selling illegal drugs?” Your child will also be asked to answer questions about any friend they choose (e.g., How much do you help this person with things he/she can’t do by him/herself?). Last, your child will be asked to answer questions about sad, anxious, or angry feelings they may have (e.g., “I feel sad much of the time”, “I feel restless and on edge”, “I destroy things that belong to others”).

Anonymity. The information obtained from your child is anonymous and will be used only for research purposes. Questionnaires will be labeled with identification numbers, and identification numbers will not be linked to your child’s name in any way. Only myself and the research team will have access to the data. All data collected will remain in a locked file cabinet in my advisor’s (Dr. Carolyn Tompsett) office. Because this survey is anonymous, any information revealed on the survey will not be reportable due to the lack of identifying information. However, if your child discusses information outside of the survey that indicates they are in danger, or they are going to put someone else in danger, I will need to report that information to the appropriate authorities because of my position as a psychology graduate student.

Risks, Benefits, and Voluntary Status. For participating, your child will be given a $5 gift card for a local restaurant (e.g., subway, quiznos, pizza hut). However, your child’s participation in this study is voluntary. Your child’s decision to participate or to not participate will not impact his or her relationship with the community organization in which your child is involved, or Bowling Green State University. Because your child is discussing and answering questions regarding his or her behavior, there may be times when your child feels uncomfortable. Your child may skip any questions that he or she does not want to answer, and may stop participating at any time without affecting their eligibility for the gift card. If your child is distressed by any of the questions asked, they will be referred to their community leader, as the leader will know them well and be able to help them become less distressed. In addition, we will be providing information on a counseling helpline (419-255-3215) for those children who may decide that they want to seek additional help. The benefit of this research is that it will help us to better understand emotional development in children who may have seen or heard violence.

When the
study is completed, presentations will be given to participating organizations on our findings. All parents of youth involved with participating organizations will be invited to these presentations.

**What do you need to do?** Please complete the form on the next page and return it to your child’s program leader as soon as possible.

**Contact Information.** If you have any questions about your rights or your child’s rights as a research participant, please contact the Chair of the Human Subjects Review board (Phone: (419) 372-7716, Email: hsrb@bgnet.bgsu.edu). If you have any questions or concerns about the research project please feel free to contact me or my advisor at the e-mail address or phone number listed below.

Thank you for your help!

Gina Veits, M.A.  Carolyn J. Tompsett, Ph.D, Assistant Professor  
Address: 338 Psychology Building  Address: 338 Psychology Building  
Bowling Green State University  Bowling Green State University  
Bowling Green, OH  43403  Bowling Green, OH  43403  
Phone: 419-372-8256  Phone: 419-372-8256  
e-mail: gveits@bgsu.edu  e-mail: cjtomps@bgsu.edu
Parent/Guardian consent form for the Bowling Green State University research project

PLEASE RETURN TO YOUR CHILD’S PROGRAM LEADER AS SOON AS POSSIBLE
-- THANK YOU!

Indicate below who has permission to participate in this study by checking off each statement that applies.

_____ Child has permission to participate.

_____ My child does NOT have permission to participate in this study.

Child’s name: ________________________________

Gender: M  or  F  (please circle one)

Birthday of child: ____/____/______

Grade: _______

Program Name: _______________________________

Parent/Guardian’s Name: _______________________________

Relationship to child (e.g., mother, father, guardian): _______________________________

Phone Number: ________________________________

Parent/Guardian Signature: ________________________________
APPENDIX G: PARTICIPANT ASSENT FORM

Dear student,

You have been invited to participate in a research project sponsored by the Department of Psychology at Bowling Green State University. The project is being conducted by Gina Veits, a graduate student, and Carolyn Tompsett, an Assistant Professor. The project is interested in how youth who may have been exposed to violence cope with feelings of sadness, anxiety, and anger and how friendship influences this process.

**What will you be asked to do?** If you decide to participate, you will be asked to answer some questions about your emotions and behaviors. The questionnaire takes about 30 minutes to fill out. You will also be asked questions about different ways that you may have been exposed to violence, including types of violence they may have witnessed or experienced (e.g., sexual assault, killings, suicidal thoughts, illegal drug selling or use). For instance, “How many times have you seen other people using or selling illegal drugs?” You will also be asked to answer questions about any friend you choose (e.g., How much do you help this person with things he/she can’t do by him/herself?). Last, you will be asked to answer questions about sad or anxious feelings that you may have (e.g., “I feel sad much of the time”, “I feel restless and on edge”, “I destroy things that belong to others”).

**Anonymity.** The answers you give are anonymous and will be used only for research purposes. Questionnaires will be labeled with identification numbers, and identification numbers will not be linked to your name in any way. Only the research team and I will have access to the data. All data collected will remain in a locked file cabinet in my advisor’s (Dr. Carolyn Tompsett) office. However, if you discuss information outside of the survey that indicates you are in danger, or you are going to put someone else in danger, I will need to report that information to the appropriate authorities because of my position as a psychology graduate student.

**Risks, Benefits, and Voluntary Status.** For participating, you will be given a $5 gift card to a local restaurant (e.g., subway, quiznos, pizza hut). Your decision to participate or to not participate will not impact your relationship with the community organization in which you are involved or Bowling Green State University. Because you will be discussing and answering questions regarding your behavior, there may be times when you feel uncomfortable. You may skip any questions that you not want to answer, and may stop participating at any time, and you will still be able to earn a gift card. If you feel upset by any of the questions asked, your community leader will be available to speak with you. You can also call a hotline at (419) 255-3215 if you would like to talk to a counselor. The benefit of this research is that it will help us to better understand emotional development in adolescents who may have seen or heard violence. When the study is completed, we will be giving presentations to participating organizations on our findings. All youth and parents of youth involved with participating organizations will be invited to these presentations.

**What do you need to do?** Please complete the form on the next page and return it to Gina before your complete the survey. IF you decide to participate, THEN you will be asked to complete a survey that will last about 30 minutes.
Contact Information. If you have any questions about your rights as a research participant, please contact the Chair of the Human Subjects Review board (Phone: (419) 372-7716, Email: hsrb@bgnet.bgsu.edu). If you have any questions or concerns about the research project please feel free to contact me or my advisor at the e-mail address or phone number listed below. Thank you for your help!

Gina Veits, M.A.
Address: 338 Psychology Building
Bowling Green State University
Bowling Green, OH  43403
Phone: 419-372-8256
e-mail: gveits@bgsu.edu

Carolyn J. Tompsett, Ph.D, Assistant Professor
Address: 338 Psychology Building
Bowling Green State University
Bowling Green, OH  43403
Phone: 419-372-8256
e-mail: cjtomps@bgsu.edu
Thank you for considering this study. Whether or not you would like to participate, please complete the below information and give it to Gina before we start filling out the survey.

Participant consent form for the Bowling Green State University research project

_____ I would like to participate.

_____ I would not like to participate in this study.

Your Name (please print): ________________________________

Gender: M or F (please circle one)

Date of Birth: ____/____/______

Grade: _______

Program Name: _______________________________

Signature: _____________________________________________

Today’s Date: ____/______/_______
APPENDIX H: HSRB APPROVAL LETTER

June 20, 2011

TO: Gina Veits
    Psychology

FROM: Hillary Harms, Ph.D.
       HSRB Administrator

RE: HSRB Project #: H100198GFB

TITLE: Exposure to Community Violence and Internalizing Symptomatology: The Role of Peer Support

The Human Subjects Review Board (HSRB) has reviewed the requested modifications you submitted for your project involving human subjects. Effective June 16, 2011, the following modifications have been approved:

1. Waiver of parental consent
2. Revised consent and assent documents.

You may proceed with subject recruitment and data collection.

The final approved version of the consent document(s) is attached. The consent document(s) bearing the HSRB approval/expiration date stamp is the only valid version and, if it is a revision to previously approved document(s), supercedes those versions. Copies of the dated document(s) must be used in obtaining consent from research subjects.

If you seek to make any additional changes in your project activities, complete the Request for Modifications/Addendum application and submit it to the HSRB via this office. Please notify me in writing upon completion of your project (or email: hsr@bgsu.edu).

Good luck with your work. Let me know if this office or the HSRB can be of assistance as your project proceeds.

COMMENTS:
Stamped original consent forms are coming to you via campus mail.

C: Dr. Carolyn Tompsett