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Family violence exposure and family relationship skills in adolescents exposed to community violence

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FAMILY VIOLENCE EXPOSURE AND FAMILY RELATIONSHIP SKILLS IN
ADOLESCENTS EXPOSED TO COMMUNITY VIOLENCE

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
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in

The Department of Psychology

By

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Abstract

Community violence exposure has been associated with a plethora of adverse aftereffects; therefore, greater understanding of compensatory and potentiating factors associated with exposure is essential for effective intervention and prevention. The purpose of this study was to investigate the relations among school violence exposure, neighborhood violence exposure, family violence exposure, parent-adolescent relationship skills, and outcomes. Participants consisted of 100 adolescents, aged 13 to 20 years. Adolescents completed the Screen for Adolescent Violence Exposure, the Behavior Assessment System for Children- Self Report of Personality, the Child Health and Illness Profile- Adolescent Edition, and the Parent-Adolescent Relationship Questionnaire. Parents/guardians completed the Behavior Assessment System for Children- Parent Report, the Parent-Adolescent Relationship Questionnaire, and a demographic questionnaire. Hierarchical regression analyses were conducted to determine if family violence and family relationship skills in adolescents exposed to school and neighborhood violence were moderator variables in the prediction of personal adjustment, adaptive skills, psychological distress, and conduct. Results revealed that family violence exposure moderated the association between school and neighborhood violence exposure and conduct. For neighborhood violence exposure, there was no relation between exposure and conduct at low levels of family violence exposure. However, there was an inverse association between neighborhood violence exposure and conduct, including delinquent and health risk behaviors and association with deviant peers, at high levels of family violence exposure. These results indicated that family violence exposure was a potentiating factor within the environments of adolescents exposed to neighborhood violence. For school violence exposure, there was no relation between school violence exposure and conduct at low levels of family violence exposure. At high levels

of family violence exposure, there was a positive link between school violence exposure and conduct, such that increased school violence exposure was related to less delinquent behavior and fewer negative peer influences. Lastly, adolescent-rated communication/problem solving skills moderated the association between school violence exposure and psychological distress, including anxiety, depression, and social stress. At more positive levels of adolescent-rated skills, the adverse impact of school violence exposure was negated. At negative levels of adolescent-rated family skills, adolescents reported more anxiety, depression, and social stress as school violence exposure increased.

Introduction

Community violence has become a serious public health problem with children and adolescents suffering greater victimization than any other age group (Finkelhor & Dziuba-Leatherman, 1994). In 1996, the Children's Defense Fund report indicated that eleven children die from a gunshot wound daily and that homicide is the second cause of death amongst adolescents. The murder rate in the United States is higher than any other industrialized nation (Duncan, 1996), and children in urban areas, especially minority children, are affected more than other children. Gladstein and colleagues compared rates of community violence exposure in inner-city and upper-middle class adolescents and found that inner-city adolescents were more likely to be victims and witnesses of assaults, sexual assaults, and murders than upper-middle class adolescents (Gladstein, Slater-Rusonis, & Heald, 1992). In Baton Rouge, Louisiana, 36% of inner-city children aged 7 to 15 years reported hearing gunshots in their neighborhood (Flowers, Hastings, & Kelley, 2000).

Researchers have given increased attention to the deleterious effects of community violence upon children and adolescents. Exposure to community violence is associated with increases in violent behavior, anger, depression, anxiety, and symptoms of posttraumatic stress disorder (Fitzpatrick & Boldizar, 1993; Farrell & Bruce, 1997; O'Keefe, 1997; Schwab-Stone et al., 1999). Clinical intervention and prevention appears to be necessary to ameliorate the negative impact of community violence upon children and adolescents. However, empirical investigations of community violence exposure have been plagued by inconsistent definitions and measurement, limiting the generalization of existing research (Guterman, Cameron, & Staller, 2000; Overstreet, 2000). For instance, various researchers have defined community in various ways, defining violence in the neighborhood, school, home and on television as

community violence exposure. Furthermore, others have not delineated the specific locus of interest, restricting interpretations of findings (Guterman et al., 2000).

The investigation of family factors, such as family cohesion or parent-child conflict, as moderators of the relation between community violence exposure and negative outcome has revealed conflicting results. This has lead researchers to hypothesize that family factors, such as lower levels of parent-child conflict, may not serve as protective factors in children exposed to community violence (Overstreet, 2000), although these factors are related to positive outcome in children exposed to other stressors (Masten, 2001). However, this hypothesis has not been adequately examined, nor have sufficient explanations been delineated. Protective factors promoting positive outcome may exist, as many children do not demonstrate negative outcome (Masten, 2001). Researchers have called for a focus upon factors related to resilience to structure interventions that promote positive outcome and overcome the negative consequences associated with violence exposure (Farrell & Bruce, 1997; Osofsky, 1999). Yet, little research concerning protective factors with minority and high-risk populations has been conducted (Osofsky, 1999).

Considering family violence exposure may be important to the study of community violence exposure due to possible association between violence in the community and violence in the home. For this review, family violence exposure will incorporate marital violence, or violence between caregiving adults, violence between other family members, and violence towards the child in the home. Preliminary results demonstrate that family violence exposure is more strongly related to psychological distress than is community violence exposure (DuRant, Getts, Cadenhead, Emans, & Woods, 1995). It has been proposed that community violence exposure may lead to a greater reliance upon physical violence during family conflict situations due to the heightened stress placed on individuals in communities with high rates of violence.

Furthermore, widespread violence in the community may lead to aggression being valued as a highly effective conflict resolution strategy through social learning processes (Shahinfar, Kupersmidt, & Matza, 2001). Osofsky and her colleagues (1993) have proposed that the effects of community violence exposure may be moderated by the impact of family violence exposure (Osofsky, Wewers, Hann, & Fick, 1993). From an ecological/transactional perspective, it is important to consider both variables as diverse environmental factors may serve to accumulate risk in these already multi-stressed families (Cicchetti & Lynch, 1993). Family violence exposure and other factors within the parent-child relationship may play a negative or a protective role in the development of children and adolescents exposed to community violence, but, again, past preliminary results are mixed.

Researchers have cautioned that it may be important to consider developmental level when investigating the effects of violence exposure upon child adjustment and psychopathology (Osofsky & Scheeringa, 1997). Due to the considerable developmental differences between children and adolescents, family relationships may be different between families with children and families with adolescents. Adolescence has been identified traditionally as a time of alteration in relationships between parents and adolescents. Family communication and problem solving skills have been implicated in the development of various psychological difficulties in adolescence (Foster & Robin, 1998). Therefore, family factors may play a different role in moderating the relation between community violence exposure and outcome in adolescents compared to children.

The purpose of this study is to delineate the relations among family factors, such as family violence exposure and communication, and the effects of community violence exposure in adolescents on positive and negative outcomes. Family violence exposure, family

communication, and family problem solving skills may moderate the relations among community violence exposure and various outcomes, both positive and negative. The following review examines the literature on exposure to community violence and family factors as potentiating and compensatory factors in the face of adversity. The theoretical framework supporting this research will be presented initially.

Ecological/Transactional Model of Community Violence

Empirical research concerning the protective factors associated with exposure to community violence is just beginning (Overstreet, 2000). Cicchetti and Lynch (1993) have proposed an ecological/transactional model of community violence that may be a useful framework to organize the research concerning this topic. This model focuses upon the relations among various factors and influences in any child's environment. They propose that the multiple levels of children's ecologies, including society, community, and the family, as well as individual characteristics of the child, interact to shape childhood development. Environmental levels interact throughout maturation of the child, thereby shaping individual development and adaptation (Lynch & Cicchetti, 1998). Individual functioning, in turn, impacts the environmental context of the child (Cicchetti & Lynch, 1993). Different levels of the environment are thought to have differential effects upon development due to differences in propinquity to the child (Lynch & Cicchetti, 1998). Within each level of the system, potentiating factors, or risk factors, and compensatory factors, or protective factors, exist which increase and decrease the risk of negative outcome in the face of community violence exposure. Cicchetti and Lynch (1993) also differentiated these factors according to temporal characteristics, as transient or enduring factors. Potentiating and compensatory factors that are enduring and more immediate to the individual are proposed to assert the most potent influence upon development. Potentiating and

compensatory factors that are more transient or distal are hypothesized to moderate the effects of other factors and to impact development directly (Lynch & Cicchetti, 1998). The presence of significant negative life events, such as community violence exposure, without compensatory factors may lead to decreased competence or psychopathology. This model attempts to incorporate the complexity of children's environments when discussing the impact of community violence (Cicchetti & Lynch, 1993). Cicchetti and Lynch call for an inclusion of the different contexts in research in order to achieve an accurate representation of the complexity of development (Lynch & Cicchetti, 1998).

Exposure to community violence can be regarded as an enduring potentiating factor within the community level. Community violence exposure may effect the outcome of children through direct effects upon development and its indirect influence upon the family and individual within the larger system (Cicchetti & Lynch, 1993). Community violence exposure appears to have deleterious effects upon childhood development and functioning. Potentiating and compensatory factors found in the family and in the individual are proposed to increase or decrease the effects of community violence exposure upon the child. Cicchetti and Lynch recognized that their ecological/transactional model of violence exposure can be useful when focusing upon positive outcome, or resilience, in the face of these significant community stressors. Enduring and transient protective factors on any contextual level could aid in the explanation of differential outcomes to community violence exposure (Cicchetti & Lynch 1993).

In an initial empirical investigation utilizing this model, Lynch and Cicchetti (1998) investigated the relations among community violence exposure, child maltreatment, and children's symptomatology, including externalizing and internalizing problems, self-reported stress, depression, and self-esteem. Participants included 322 children ages 7 to 12 years. Child

maltreatment was defined by a substantiated case with the Department of Social Services (DSS) and involved physical abuse, sexual abuse, physical neglect, or emotional maltreatment. Child maltreatment was found to be related to child community violence exposure. Specifically, greater rates of exposure to community violence were positively correlated with the rate of physical abuse and the severity of neglect. Both community violence exposure and child maltreatment were linked with negative outcomes in children. Child maltreatment was positively correlated with ratings of externalizing and internalizing problems, as rated by a summer camp counselor. Community violence exposure was associated with child reported symptoms of depression and traumatic stress and lower self-esteem. These results are significant as exposure to community violence continued to have a significant impact upon outcome, even after controlling for the more proximal variable of child maltreatment. Lynch and Cicchetti noted that child maltreatment and community violence exposure may have additive effects, not the moderated effects they originally proposed. They caution that more research is needed to carefully delineate the relations among these risk factors, outcome variables, and compensatory factors.

Utilizing the ecological/transactional framework, it may be important to consider marital and family violence exposure as potentiating factors within the family system. The family environment is thought to play a unique role in the development and adjustment of children and adolescents (Richters & Martinez, 1993b); therefore, direct violence upon the child and witnessing marital violence may have a significant influence upon development. In a transactional/ecological model, the combination of family violence and community violence exposure may interact to exacerbate the negative impact upon development. Exposure to community violence has been found to be associated with higher rates of child maltreatment (Lynch & Cicchetti, 1998) and marital violence (Osofsky et al., 1993; Richters & Martinez,

1993a). Community violence could lead to an increase in family violence and a decrease in effective parenting (Lynch & Cicchetti, 1998). Additionally, marital conflict has been associated with a plethora of difficulties within the family environment, including higher rates of physical abuse (Jouriles, Barling & O'Leary, 1987) and disruptions in the parent-child relationship (Cummings, 1998).

Family communication and problem solving skills may serve as compensatory factors within the family environment. The presence of these skills in the parent and in the adolescent has been linked to positive family relationships and the absence to negative family conflict (Foster & Robin, 1998). Therefore, parent-adolescent relationship skills may protect adolescents from the deleterious impact of exposure to community violence. Community violence exposure, however, may so overwhelm families that these skills may not serve the protective role one would assume. Preliminary research indicates that factors, such as decreased parent-child conflict, do not serve a compensatory function in the face of community violence exposure (Miller, Wasserman, Neugebauer, Gorman-Smith, & Kamboukos, 1999). Cicchetti and Lynch (1993) caution that enduring potentiating factors such as exposure to community violence may have overreaching impact upon the family environment, possibly reducing the role of family skills as a protective factor. Consequently, it is important to investigate the role of particular family factors, such as parent-adolescent relationship skills, as moderators of the association of outcome and community violence exposure.

In summary, the ecological/transactional model will be utilized as a framework for the potential protective and risk factors which will become the focus of this investigation. These potential protective and risk factors include exposure to family violence and parent-adolescent relationship skills. The role of factors within the family environment, such as family violence

exposure and family communication and problem solving skills, may serve as moderating factors which increase or reduce the potentiating influence of violence within the exosystem. Careful delineation of the associations between risk factors, such as community violence exposure, potential protective factors, and outcome must be investigated (Cicchetti & Lynch, 1993).

Exposure to Community Violence

Rates of community violence exposure. Exposure to community violence among children and adolescents has been a growing area of empirical interest. Community violence exposure has been defined as “frequent and continual exposure to the use of guns, knives, and drugs, and random violence” (Osofsky, 1995, p.782). Schwab-Stone and colleagues (1999) investigated rates of violence exposure in approximately 2000 students in grades 6, 8 and 10. They found that 36% of students had been the victim of at least one violent act, including 5% to 10% who reported being attacked with a knife, being beaten, being shot or shot at, and being seriously wounded. Additionally, over half of the sample reported witnessing violence. Forty-eight percent to sixty-three percent witnessed someone else being threatened, beaten, mugged, or seriously wounded. Forty-six percent of students saw someone shot or shot at, and 25% witnessed attacks with knives. In a sample of 935 adolescents ages 14 to 20 years, approximately 50% of males and 25% of females reported witnessing stabbing and shooting in their neighborhoods, while 40% to 50% of students reported viewing attacks with knives in the school setting (O’Keefe, 1997). Fitzpatrick and Boldizar (1993) surveyed 221 low-income, African-American children ranging from 7 to 18 years of age. Seventy percent of children and adolescents reported being the victim of at least one violent act, and 85% of children reported witnessing at least one act of violence. Specifically, 66% of the respondent indicated they witnessed someone being beaten up or mugged. Lastly, community violence was investigated in New Orleans public housing through

interviews with mothers. Ninety-one percent of mothers reported that their children had witnessed community violence, and fifty percent of children reportedly had been the victim of violent crime (Osofsky et al., 1993). Clearly, children and adolescents are the victims and witnesses of violence in their neighborhoods at alarmingly high rates. Furthermore, the rates of witnessing violence are higher than the rates of victimization.

Violence within the school setting has been identified as a ubiquitous phenomenon. A recent summary published by the National Center for Education Statistics revealed high rates of violence in the nation's schools. In 1999, there were 2.5 million crimes perpetrated against adolescents in the schools. In particular, adolescents aged 12 to 18 were victims of approximately 186,000 violent crimes, including rape, sexual assault, robbery and aggravated assault, in the school setting. Furthermore, seven to eight percent of high school students indicated that they were threatened or injured with a weapon at school. Teachers were also a focus of violence, as there were 1,708,000 crimes against teachers from 1995 to 1999. These crimes included 1,073,000 thefts and 935,000 violent crimes, including rape, sexual assault, robbery, and aggravated assault (National Center for Education Statistics, 2001). O'Keefe (1997) found that about 80% of high school students in her sample reported witnessing someone being beaten up and 62% of males and 46% of females stated they had seen someone threatened with a knife or gun. These data clearly demonstrated that violence in the school setting is a particular problem and leads to considerable rates of school violence exposure.

Definitional inconsistencies plague research concerning the rates of community violence exposure, as few studies specifically delineate a definition of "community" and define the parameters of community violence exposure (Guterman et al., 2000). In a recent review, Guterman and colleagues (2000) noted that investigations of community violence exposure have

included various settings, including neighborhood, school, home, and television, but most studies do not specify the location of violence exposure. Without precise delineations of the setting of violence exposure, rates of community violence exposure may vary widely as a function of the inclusion of diverse parameters.

Gender differences in victimization and exposure to violence have been investigated empirically. Males are more likely to be the victims of community violence than are females (Fitzpatrick & Boldizar, 1993; O'Keefe, 1997; Richters & Martinez, 1993a; Schwab-Stone et al., 1999). However, females appear to have higher rates of victimization in the home, sexual assault, and interpersonal aggression (Bell & Jenkins, 1993; Fitzpatrick & Boldizar, 1993; Hastings & Kelley, 1997; Singer, Anglin, Song, & Lunghofer, 1995). Inconsistent findings are available for gender differences in violence exposure (Berman, Kurtines, Silverman, Serafini, 1996; Cooley-Quille, Boyd, Frantz, & Walsh, 2001; Fitzpatrick & Boldizar, 1993; O'Keefe, 1997; Singer et al., 1995).

Ethnic differences in community violence exposure may be important considerations as many studies have found that ethnic minorities are at a higher risk for violence exposure. African-American children have been demonstrated to have higher rates of violence exposure than Caucasian children (Gladstein et al., 1992; Schwab-Stone et al., 1999). However, other researchers who have demonstrated that differences in exposure can be contributed to socioeconomic status have challenged these racial differences (Cooley, Turner, & Biedel, 1995). There are few studies controlling for socioeconomic status when investigating racial differences. Studies focusing upon urban youth tend to have few Caucasian children and largely African-American samples, thereby, confounding ethnicity and socioeconomic status.

Age differences have not been the focus of much study. Fitzpatrick and Boldizar (1993) assessed community violence exposure in a sample of 221 children ages 7 to 18 years. Three developmental age groups were created, 7 to 10 years, 11 to 14 years, and 15 to 18 years and no differences in levels of witnessing of or victimization from community violence were identified. In a smaller study of 60 children ages 7 to 12 years and 13 to 17 years, some differences were found. Adolescents were more likely to report being the victims of individual violence than children, but few other differences emerged (Jones, Ajitutu, & Johnson, 1996).

Rates of community violence exposure appear to be high, particularly in urban areas. Many children and adolescents in inner-city areas are the victims of violent crime and even more children and adolescents witness and hear of accounts of murders and violent attacks in their neighborhoods. Researchers have begun to demonstrate the plethora of negative consequences stemming from this ubiquitous exposure to violence.

Consequences of community violence exposure. Victimization and chronic exposure to community violence has been related to a score of deleterious psychological consequences. Researchers have focused upon symptoms of trauma, particularly symptoms of posttraumatic stress disorder (PTSD). Increasing exposure to community violence and greater rates of victimization have been related to symptoms of PTSD (Berman et al, 1996; Fitzpatrick & Boldizar, 1993; Horowitz, Weine, & Jekel, 1995; Lynch & Cicchetti, 1998; Martinez & Richters, 1993; Singer et al, 1995). For instance, Li and colleagues found that increased violence exposure was linked to greater number of intrusive thoughts and distraction (Li, Howard, Stanton, Rachuba, & Cross, 1998). Others have demonstrated a positive relation between exposure and symptoms of PTSD, after controlling for the effects of child maltreatment upon trauma symptomology (Lynch & Cicchetti, 1998). Contrary to the above findings, Cooley-Quille and

colleagues found that exposure to community violence was not related to internalizing problems, including PTSD, when measuring internalizing problems with a semistructured interview (Cooley-Quille, Turner, & Biedel, 1995).

In addition to PTSD, the association of other internalizing problems and violence exposure have been investigated, but these results have been mixed. Higher rates of depression (DuRant et al., 1995; Hurt, Malmud, Brodsky, & Giannetta, 2001; Singer et al., 1995), hopelessness, and lower purpose in life (DuRant et al., 1995) were associated with chronic exposure to violence. Recently, a study of inner-city adolescents indicated that adolescents with higher rates of violence exposure endorsed more fears, anxiety, and internalizing behavior than adolescents with lower rates of violence exposure (Cooley-Quille et al., 2001). Contrary to these findings, Fitzpatrick (1993) indicated that victims of violence reported more depressive symptoms, but similar findings were not found for witnessing community violence. Violence exposure was not related to emotional distress (Farrell & Bruce, 1997) or depression (Cooley-Quille et al., 2001) in other research. The differential results may be partly a function of reporter with children and adolescents recounting significant internalizing problems and mothers denying internalizing problems (Overstreet, 2000).

The connection between externalizing problems and violence exposure is a growing area of interest with many researchers finding significant results (Cooley-Quille et al., 1995; Gorman-Smith & Tolan, 1998; Lynch & Cicchetti, 1998). Exposure to violence was linked to increased aggressive behavior after controlling for other types of stressors and previous symptom status (Gorman-Smith & Tolan, 1998). O'Keefe (1997) found that aggressive behavior, especially for males, was positively connected to exposure after controlling for family violence and sociodemographics. Others found an association between aggressive behavior and community

violence exposure, after controlling for previous violence, but only in girls (Farrell & Bruce, 1997). A concurrent positive connection between exposure, internalizing and externalizing problems was demonstrated longitudinally, with an inverse relation found between ratings of anxious behaviors and externalizing problems (Schwab-Stone et al., 1999). In a longitudinal study of the relation between exposure to community violence and antisocial behavior in boys ages 6 to 10 years, Miller and her colleagues found a positive relation between witnessing violence and delinquent behaviors, after controlling for previous antisocial behavior and parent-child interactions (Miller et al., 1999). Again, these results are mixed as Cooley-Quille and colleagues did not find a link between self-reported externalizing behavior problems and violence exposure in inner-city adolescents (Cooley-Quille et al., 2001).

Few studies have examined the association of exposure to community violence and other variables, such as academic achievement. Investigations examining the relation between community violence and academic achievement have found contradictory results. For instance, Attar, Guerra, and Tolan (1994) reported no connection between community violence exposure and academic achievement, whereas others have demonstrated an inverse relation between the two variables (Bowen & Bowen, 1999; Hurt et al., 2001; Nettles, Mucherah, & Jones, 2000; Schwab-Stone et al., 1995). Overstreet and Braun (1999) examined academic achievement in 45 African-American children ages 11 to 14 years. A significant and negative correlation between academic achievement and community violence exposure was demonstrated; however, this relation was found to be weaker when other factors, such as age, gender, and emotional distress, were controlled. The authors noted that low sample size may have impacted these results. They hypothesize that community violence exposure may impact academic achievement only when other factors, such as emotional distress, are present.

Possible deleterious effects of community violence exposure upon peer relationships have not been the focus of much research. In a preliminary study, Hill and Madhere (1996) did not find a relation between social competence in the classroom, as rated by teachers, and community violence exposure. However, a relation between greater confrontational behavior and exposure was found for children when mothers served as the informants. Additionally, social competence was negatively related to family income. Osofsky (1995) hypothesized that community violence should have a negative impact upon the formation of social competence and peer relationships, but further research is necessary to delineate any association between these variables.

Community violence exposure may have a negative impact upon health related behavior. The perception of a shortened future has been found to be related to exposure (Schwab-Stone et al., 1995). Kuthar (1999) speculated that a belief in a shortened future has ramifications for health-related behaviors and risk-taking. For example, Fick and Thomas (1995) investigated potential substance use, health values, and health locus of control in children ages 10 to 13 years of age. Greater levels of community violence exposure were associated with greater intention to smoke and lesser belief in the ability to have control over health. In a recent investigation, adolescent girls who have witnessed community violence were two to three times more likely to use tobacco or marijuana and to use alcohol or drugs before sex. Unfortunately, these results are limited due to the use of an unstandardized measure of community violence exposure (Berenson, Wiemann, & McCombs, 2001). Due to the rates of drug use and sexual activity, investigations of links among community violence exposure, health behaviors, and risk behaviors are important to prevention and intervention.

Community setting differences have not been the focus of much consideration. For example, violence exposure in neighborhoods, schools, and home are often examined together,

although there may be important differences in the impact of violence exposure across these varied locations (Guterman et al., 2000). Violence exposure in the home will be considered in depth later in this review, but there are very few investigations of the differential impact of neighborhood and school violence exposure. Witnessing violence in both neighborhood and school settings has been linked to perpetration of violent behavior (Singer et al., 1999; Song, Singer, & Anglin, 1998), school attendance, and academic functioning (Bowen & Bowen, 1999) in both genders, and externalizing behaviors in males (O'Keefe, 1997). However, school violence exposure alone, not neighborhood violence exposure, predicted internalizing and externalizing behavior problems in females (O'Keefe, 1997). Contrarily, Springer and Padgett (2000) found that, in males, witnessing violence in the school, but not neighborhood, was linked to symptoms of posttraumatic stress. Female students demonstrated the opposite pattern of results. Further empirical study of setting differences in community violence exposure is needed to advance the definition of community violence exposure by delineating the context of violence. The context of violence and its differential impact may be important to the creation of successful prevention and intervention programs (Guterman et al., 2000).

As with rates of community violence exposure and victimization, gender differences are inconsistent across studies. Some studies have found no differences between male and female distress symptomatology associated with violence exposure (Berman et al., 1996; Li et al., 1998; Schwab-Stone et al., 1999). Contrary to these findings, female gender has been determined by other researchers to be the largest predictor of trauma symptoms (Fitzpatrick & Boldizar, 1993; Singer et al., 1995; Song et al., 1998). Females also reported a higher rate of problems such as anxiety, anger, depression, and suicidality (Barton & Stabb, 1996; Fitzpatrick, 1993; Flannery, Singer, & Wester, 2001; O'Keefe, 1997), although, Fitzpatrick (1993) found this relation to hold

only for girls who have been victims of violence. Concerning externalizing problems, fewer studies have been conducted. O'Keefe (1997) found no relation between gender and exposure for externalizing behaviors, while Farrell and Bruce (1997) found that exposure was related to the frequency of acting out behavior, but only for females. However, in a study of dangerously violent adolescents exposed to community violence, dangerously violent adolescent girls were less likely than males to have beaten someone up, threatened someone, or shot at or shot someone (Flannery et al., 2001). Clearly, more research concerning gender differences in distress symptoms and violence exposure is warranted.

Age differences in psychological sequelae have not been adequately addressed. In a review of the literature, Osofsky and Scheeringa (1997) only identified three studies which targeted age differences. Younger children ages 7 to 10 years were found to have increased depressive symptoms compared to 11 to 18 year olds (Fitzpatrick, 1993). Contrarily, younger and older participants did not evidence differences for symptoms of PTSD (Fitzpatrick & Boldizar, 1993). Lastly, 1st and 2nd grade children and 5th and 6th grade children were found to have increased problems in relation to community violence exposure, but the groups were not directly compared (Martinez & Richters, 1993). Overall, adolescents as a group are more likely to engage in negative behaviors such as sexual behaviors, drug use, and cigarette smoking, but possible age differences in impact of violence exposure are mostly unknown (Osofsky & Scheeringa, 1997).

Overall, research has demonstrated a connection between community violence exposure and various negative outcomes, including increased symptoms of PTSD (Berman et al., 1996), depression (DuRant et al., 1995), aggressive behavior (Gorman-Smith & Tolan, 1998), and decreased academic achievement (Schwab-Stone et al., 1995). However, these results have been

equivocal, as many investigations have failed to find a significant association between violence exposure and negative outcome. Researchers have begun to expand these investigations as they begin to examine factors which moderate the relation between negative outcome and violence exposure. Furthermore, exposure to community violence may not lead unilaterally to negative outcome, therefore, research involving positive outcome and factors which lead to the avoidance of negative outcome appears necessary.

Moderators of the effects of exposure to community violence. Only recently have researchers begun investigating factors which may moderate the relations among community violence exposure and various outcomes. The majority of these studies have utilized negative outcome, such as externalizing problems or PTSD, as predictor variables; therefore, research involving positive outcome or protective factors is sparse. The importance of investigating potential moderators is underscored in an ecological/transactional theory as many factors may serve as potentiating and compensatory factors, altering the relation between violence exposure and child development (Cicchetti & Lynch, 1993). One ultimate goal of this research is to identify compensatory factors, and, thereby, targets of intervention to reduce the deleterious impact of potentiating factors. Therefore, empirical investigations of compensatory factors should expand the selection of outcome variables to include positive outcome, or resilience (Masten, 2001). The study of resilience alters the traditional focus upon negative behaviors and focuses upon processes that lead to avoidance of negative behaviors or attainment of positive outcome (Zimmerman, Ramirez-Valles, & Maton, 1999).

Compensatory factors and potentiating factors have been defined according to their moderating properties. A moderator has been characterized as a variable that impacts the direction or the strength of the relation between a predictor variable and a criterion variable

(Baron & Kenny, 1986). A significant moderation effect indicates that the relation between the predictor and criterion varies according to the level of the moderator. This can be compared to a mediator, which is a variable that accounts for the relation between a predictor and a criterion. Baron and Kenny noted that a moderator specifies the conditions in which an effect will hold, but a mediator explains how and why an effect occurs. In community violence exposure research, a compensatory factor would decrease the impact of community violence exposure upon an outcome, such as psychopathology, while a potentiating factor would increase the strength of the relation between community violence exposure and psychopathology (Cicchetti & Lynch, 1993; Lynch & Cicchetti, 1998).

The role of family factors in the association among community violence exposure and various outcomes has been demonstrated in some empirical investigations. Overstreet and Braun (1999) evaluated the role of family achievement expectations and religion in moderating the relation between violence exposure and academic achievement in 45 African-American children. Children who felt their parents held high academic achievement demands for them and whose families held a strong religious emphasis were found to demonstrate poorer academic achievement as exposure to community violence increased. Children with low levels of violence exposure who were from families with a religious emphasis and high academic achievement expectations had the highest rates of academic achievement. The authors speculate that community violence exposure may negatively impact the family environment and modify the role of the family as a compensatory factor for children and adolescents exposed to community violence (Overstreet, 2000). Additional research concerning the family in promoting positive outcome is clearly needed.

Overstreet and her colleagues investigated family support as a moderator of the association of community violence exposure, depression and PTSD. Family support was defined as mother's presence in the home and family size in this study of 75 low income, African-American children ages 10 to 15 years. The researchers reported controlling for the effects of age, sex, and concurrent life stress. They found that a mother's presence in the home moderated the relation between community violence exposure and depression, but not PTSD. Greater maternal presence was associated with decreased depression scores in the face of community violence exposure. Family size, although not statistically significant, approached significance as smaller families with community violence exposure were at greater risk for depressive symptoms (Overstreet, Dempsey, Graham, & Moely, 1999). Additionally, family structure was determined to be a significant and negative predictor of aggression, anxiety, and depression in 245 boys in grades five and seven. Structure was defined as the amount of organizing and support in the family, as well as the extent to which the family has deviant beliefs (Gorman-Smith & Tolan, 1998). Altogether, these studies indicate that family factors may play a role in affecting the relation between community violence exposure and outcome, but this role is not necessarily apparent. However, only one study has utilized positive outcome as a criterion variable.

Richters and Martinez (1993b) discovered interesting findings when assessing children's adaptational failure, defined by the presence of behavior problems and poor academic achievement. Maternal and child ratings of community violence exposure did not significantly predict adaptational failure; however, teacher rated home stability and children's reports of the presence of drugs and/or guns in the home predicted 21% of the variance in failure scores. Successful families in this study appeared to serve as a compensatory factor for children exposed to community violence.

Contrary to these positive findings, studies examining the potential protective role of family factors between community violence exposure and antisocial behavior have found contradictory results (Overstreet, 2000). Miller and her colleagues examined the relation between exposure to community violence and antisocial behavior in ninety-seven at-risk boys. Participants were considered at-risk due to their urban residence, gender, and having a sibling with involvement in the juvenile court system. They determined that witnessing community violence was related significantly to the Delinquency Scale of the Child Behavior Checklist (CBCL) only for boys in families with lower levels of parent-child fighting. For families with high rates of parent-child fighting, community violence exposure was not related to antisocial behavior. Although parent-child conflict served as a moderator variable, low levels of parent-child fighting did not serve as a protective factor for the effects of community violence exposure (Miller et al., 1999). Secondly, community violence exposure was linked with aggressive behavior only in families with high levels of structure in a sample of 245 African-American and Latino boys in fifth and seventh grades. Other family factors such as cohesion, discipline, or monitoring were not significant predictors of aggression (Gorman-Smith & Tolan, 1998). These studies illustrate the need to investigate variables which have been determined to be protective factors in other populations in children with exposure to community violence. Factors such as family structure and parent-child conflict may not serve as protective factors for antisocial behavior in this particular population (Overstreet, 2000).

Moderators involving familial and extrafamilial social support have been investigated. For instance, social support has been demonstrated to moderate the link between exposure to community violence and PTSD (Berman et al., 1996), but others did not find significant results when examining social support as a moderator between community violence exposure and

anxiety (White, Bruce, Farrell, & Kliewer, 1998). Moreover, Springer and Padgett (2000) found that increased social support from family, friends, and school personnel was linked with increased levels of PTSD symptomatology in girls ages 11 to 14 years. Lastly, social support was not related to competence, defined as antisocial behaviors, teacher ratings of academic performance, school records of grade point average, recent math and reading scores, absences, tardies, and number of suspensions, in 185 children in seventh and eighth grades. Participants were divided into four groups of high and low competence and high and low stress. In this investigation, community violence exposure was not the only risk factor as the measure included items measuring other stressful life events. Resilient participants, or high stress-high competence students, did not report differences in coping strategies, levels of family support, or extrafamilial support. The authors noted that resilient and stress affected students (high stress and low competence) reported similar rates of anxiety and depression (D'Imperio, Dubow, & Ippolito, 2000). Overstreet (2000) noted that differences in the significance of social support may depend upon the definition of social support that is utilized. She discussed that defining social support in terms of availability, such as mother's presence in the home, has led to negative results, while characterizing social support as perceived familial social support has demonstrated some positive results.

Researchers are just beginning to explore an expanded range of factors which may alter the relation between community violence exposure and outcome in children and adolescents. DuRant and his associates investigated factors associated with violence perpetration in inner-city, African-American adolescents. Examining positive outcomes when there was past exposure to community violence, the authors reported that adolescents who rated themselves as less likely to engage in violent behaviors also indicated lower levels of hopelessness, greater purpose in life,

and had a greater belief in the likelihood that they would be alive at age 25. Furthermore, adolescents who attended religious services more often and had a higher SES had higher purpose in life scores, which were linked to lower levels of violence behaviors. Lastly, having a head of the household with employment was related to lower levels of hopelessness, higher purpose in life, and a greater belief in being alive at age 25. This study is a step in the direction of delineating the variables related to positive outcome in children and adolescents exposed to community violence (DuRant, Cadenhead, Pendergrast, Slavens, & Linder, 1994).

In summary, the family environment and individual factors have been related equivocally to outcome in the face of exposure to community violence. Family factors, such as decreased family social support and decreased maternal education, may heighten the negative impact of violence exposure upon children and adolescents; however, these results are not unambiguous and absolute (Overstreet, 2000). Additionally, few investigations have examined the potential protective factors which lead to positive outcome despite negative environment. The family may play a great role in influencing adaptational success in the face of significant risk factors, such as community violence exposure (Richters & Martinez, 1993b). Clearly, more research concerning family factors which promote successful development and adaptation and those which thwart successful growth are needed. Specifically, family violence exposure, as a family factor, may serve as a moderator of the relations among community violence exposure and positive and negative outcome.

Exposure to Family Violence

The potential connection between exposure to family and to community violence underlines the importance of investigating both of these variables. For instance, DuRant and colleagues (1995) found a stronger connection between psychological distress and family

violence exposure than community violence exposure; hence, the relation must be investigated further. It has been proposed that community violence exposure may increase the likelihood of physical violence in the home due to greater stress on families and individuals. Family violence exposure may moderate the effects of community violence exposure upon child and adolescent development, decreasing the impact of community violence exposure upon adolescent development (Osofsky et al., 1993). Consequently, the potential moderating relation between these two risk factors will be examined in this study. As mentioned previously, marital violence will be defined for this review as violence between caregiving adults in the home, while family violence will incorporate marital violence, violence between other family members, and aggression towards the child.

Rates of family violence exposure. The epidemic of violence apparent in the community is prevalent within American homes (Holden, 1998). The exact number of children exposed to marital violence is unknown, but it has been estimated that 10 million to 18 million children are witnesses every year (Silvern et al., 1995; Straus, 1991, as cited in Holden, 1998). Additionally, a considerable number of children and adolescents are direct victims of family violence as the rates of reported physical abuse of children and adolescents testify. In 1993, the prevalence of reported child physical abuse cases was 5.7 per 1,000 children or approximately 382,000 cases (Kaplan, Pelcovitz, & Labruna, 1999). The incidence of adolescent maltreatment is nearly equivalent to rates for younger children (Salzinger, 1999). These figures may be gross underestimates as many cases remain unreported yearly (Kaplan, Pelcovitz, & Labruna, 1999).

Clear confounds between exposure to marital violence and child physical abuse may exist. Children who are exposed to marital violence are also at greater risk for physical abuse directed toward themselves. The risk for physical abuse in this population has been estimated to

range from 20% to 100%, with a median estimate of 59% (Appel, Angelelli, & Holder, 1997, as cited in Holden, 1998). In a national survey, living in a household where there is domestic violence increased the risk for childhood physical abuse by 70% for children and adolescents (Tajima, 2000). The effects of direct physical aggression towards the children may better account for behavior problems thought to be associated with witnessing marital violence, but this has not been consistently investigated.

Methodological factors associated with the literature complicate the research concerning the effects of exposure to family violence. First, many studies of marital violence exposure utilize children and mothers who are living in battered women's shelters. The stress of the shelter residence and unfamiliar surroundings may account for childhood distress rather than previous violence exposure (Osofsky & Scheeringa, 1997). Secondly, the majority of studies of marital violence exposure have utilized maternal report only. This can be problematic due to the low rates of agreement between children and their mothers concerning problematic behavior.

Mothers may overreport externalizing problems due to maternal psychopathology or underreport internalizing problems in their children (Sternberg et al., 1993; Sternberg, Lamb, & Dawud-Norsi, 1998). Moreover, mothers have been found to underreport children and adolescent exposure to family violence. Mothers may be unaware that their children are witnesses or victims of violence or purposely underreport their offsprings' exposure (Osofsky & Scheeringa, 1997).

Exposure to marital violence. As with exposure to community violence, exposure to marital violence has been associated with a host of negative consequences for children and adolescents. These deleterious outcomes found in empirical studies include aggression, noncompliance, post-traumatic stress symptoms, anxiety, and depression (Holden, 1998). It has been estimated that 25% to 75% of children exposed to marital violence have clinically

significant problems with a median of 40% (Holden, 1998), while the median for comparable low-income families is approximately 25% of children evidencing clinically significant behavior problems (Hughes & Luke, 1998). However, results have been mixed concerning the connection between specific difficulties and marital violence exposure.

The majority of research examining effects of marital violence exposure has focused upon broad band scores of internalizing and externalizing problems. There has been mixed evidence concerning the correlation between externalizing problems and exposure (Jouriles et al., 1987; Wolfe, Zak, Wilson, & Jaffe, 1986; Wolfe, Jaffe, Wilson, & Zak, 1985). The relation may be complicated by gender differences, with some investigations indicating higher externalizing problems only in girls (Christopoulos et al., 1987) and others finding contradictory results (Hughes & Barad, 1983). Unfortunately, research has not been more consistent concerning the relation between internalizing behavior and witnessing violence in the home. The positive link between internalizing scores and marital violence exposure has been demonstrated in empirical investigations (Christopoulos et al., 1987), but others failed to discover significant differences (Wolfe et al., 1986).

Significant correlations between marital violence exposure and post-traumatic stress symptoms have been demonstrated in adolescents (Flannery, Singer, Williams, & Castro, 1998) and children (Kilpatrick & Williams, 1997). One investigation found that children who were victims of sexual maltreatment or had witnessed marital violence were more likely to be diagnosed with PTSD than children whose maltreatment histories did not include those variables (Famularo, Fenton, & Kinscheriff, 1993). These studies begin to draw attention to the need to consider exposure to marital violence as a risk factor for the development of PTSD.

Social competence, peer relations and the effects of exposure to marital violence have been considered. Children and adolescents of women who were abused were found to spend less time with peers and to have more negative peer social skills (Dawud-Noursi, Lamb, & Sternberg, 1998). Nonetheless, others studies have not demonstrated links between declining social competence or aggression and exposure to marital violence (Hughes, 1988; Jaffe, Wolfe, Wilson, & Zak, 1986; Sternberg et al., 1998). Inconsistencies in findings may result from diverse measurement tools; for instance, many investigations rely upon the CBCL as a measure of social competence, whereas others employ direct observation or other behavior rating scales.

Gender and age differences may be important in considering the effects of marital violence upon children and adolescents. Some studies have found girls to have greater externalizing problems (Kolbo, 1996; Sternberg et al., 1993), while others have found opposite results (Flannery et al., 1998; Wolfe et al., 1985). These gender differences may be an accurate reflection or an artifact of inadequate sample size (Holden, 1998). Age differences have not been adequately addressed as most studies utilize children under ten (Cummings, 1998). Initial studies of adolescents indicated that marital violence exposure contributes to adolescent distress, internalizing, and externalizing problems (Harold & Conger, 1997).

Child physical abuse. Child physical abuse has been associated with a plethora of deleterious consequences, including aggression, social deficits, and cognitive impairment (Kaplan, Pelcovitz, & Labruna, 1999). Aggressive behavior and decreased social functioning has been consistently tied with physical abuse (Kaplan et al., 1998). Adolescents who have been physically abused are at higher risk for violent behavior, conduct disorder (Kaplan, Pelcovitz, & Labruna, 1999), social problems, and aggression in dating relationships than comparison peers (Wolfe, Wekerle, Reitzel-Jaffe, & Lefebvre, 1998). Physically abused children were

demonstrated to have more discipline problems at school (Eckenrode, Laird, & Doris, 1993), have higher parent and teacher reported aggressive behaviors (Haskett & Kistener, 1991), and have higher peer ratings of aggressive behaviors (Salzinger, Feldman, Hammer, & Rosario, 1993). Moreover, physically abused children were found to be less popular, more disliked than peers (Salzinger et al., 1993), and more hostile with friends than nonabused children (Parker & Herrera, 1996).

Physically abused adolescents have been found to demonstrate overall higher levels of psychopathology and risky behaviors than community controls. In an examination of White adolescents, data revealed higher rates of diagnoses after controlling for parental psychopathology, family structure, and gender. Abused adolescents exhibited higher rates of major depression, dysthymia, conduct disorder, drug use, and cigarette use (Kaplan et al., 1998). Physically abused adolescents also had higher rates of suicidal behavior, substance use, and sexual behavior than nonabused adolescents (Riggs, Alario, & McHorney, 1990). Gender differences may exist, as associations among physical abuse, drug use, and index offenses were found for boys at a juvenile assessment center, but not for girls (Dembo et al., 2000).

The association between physical abuse and internalizing problems has been examined. When physically abused, neglected and comparison children were examined, the physically abused group had significantly higher levels of depression, after controlling for age and cognitive functioning. Overall, 22% of physically abused children exceeded the clinical cutoff score for the Children's Depression Inventory (CDI), compared to 6% of comparison and 3% of the neglected children (Toth, Manly, & Cicchetti, 1992). Childhood physical abuse has been linked with suicidal ideation and attempts (Kaplan, Pelcovitz, et al., 1999) and symptoms of posttraumatic stress disorder (Boney-McCoy & Finkelhor, 1995; Silva et al., 2000). However, results have

been mixed concerning symptoms of PTSD in physically abused children and adolescents (Kaplan et al., 1998; Margolin & Gordis, 2000).

Combined effects of family violence. Research comparing externalizing problems in children who have been physically abused, witnessed violence, or have been both victims and witnesses has produced diverse results (Margolin & Gordis, 2000), although studies of marital violence exposure that consider child physical abuse are a rarity (Osofsky & Scheeringa, 1997). Studies have demonstrated that physical abuse and witnessing marital violence results in significantly more behavior problems than witnessing violence alone (Dawud-Noursi et al., 1998), but others found conflicting results (Hughes, 1988; Sternberg et al., 1993). Sternberg and her associates (1993), using an Israeli sample, found inconsistent differences depending upon the informant. When children served as informants, no significant differences were found between witness only and the comparison group for externalizing problems. Utilizing maternal reports indicated significant differences between the witness only and abused witnesses and the comparison group, but no differences between witnesses and abused witnesses.

The potential confounding variable of exposure to physical abuse when considering marital violence exposure has begun to be examined with internalizing problems as the criterion variable. Children who have witnessed marital violence and those who have been victims of abuse and witnesses of violence were not found to differ on anxiety scores, but the scores of these two groups were different from the comparison children (Hughes, 1988). Moreover, Sternberg and her colleagues (1993) found that, when children served as the study informants, no differences were found between children who only witnessed violence, children who were physically abused, and children who were abused and witnessed violence on the CDI. Children in all three groups rated themselves as having more depressive symptoms than comparison

children. The combination of abuse and exposure to marital violence may increase the risk of developing internalizing problems in children (Margolin & Gordis, 2000). When parent-child aggression and marital violence exposure were measured separately in adolescents, both were positively related to internalizing and externalizing problems, controlling for demographic variables and the other variable. Additionally, a significant interaction was found, such that when parent-child aggression was low, exposure to marital violence had a negative effect upon adjustment (O'Keefe, 1996). Clearly, more research is needed considering the potential confound of physical abuse and witnessing violence on adjustment.

In summary, family violence exposure, including exposure to marital violence and child physical abuse, are related inconsistently to a score of deleterious consequences, including aggression, internalizing problems, academic deficits, and social incompetence. Few studies have investigated family violence exposure within the context of community violence. Similar to family violence exposure, family relationships and parent-adolescent skills may be related to functioning for adolescents, particularly those exposed to community violence.

Family Relationships in Adolescence

Adolescents are confronted with developmental challenges that are different from their younger counterparts. Margolin and Gordis (2000) caution that violence and abuse can have very different effects upon children at diverse developmental stages; therefore, understanding the effects of community violence exposure depends upon a consideration of these differences. Rates of violence exposure and abuse do not appear to decline in adolescents, but these authors noted that societal biases may lead many to believe that adolescents are responsible for their violence exposure and do not require as much intervention as younger children. Furthermore, adolescents often engage in riskier behaviors, such as sexual activity or drug use (Lynch & Cicchetti, 1998).

Due to these developmental differences within adolescence, family factors may play a distinct role in exacerbating or alleviating the effects of violence exposure (Ary et al., 1999). Family conflict, parent-adolescent involvement, and parental monitoring, for example, have been linked to adolescent antisocial behavior, theoretically and empirically (Ary et al., 1999).

Adolescence has traditionally been viewed as a period of changing family relations. Garbarino (1989) noted that many factors function distinctly in families of adolescents. He indicated that adolescents have greater cognitive abilities, larger social networks, and quests for autonomy with which parents must cope. These major developmental tasks during adolescence, such as learning to be autonomous, may disturb the established patterns of family interaction (Robin & Foster, 1989). Increased family conflict during adolescence has been chronicled (Paikoff & Brooks-Gunn, 1991). Multi-stressed families may have additional difficulty maneuvering through these developmental changes. Therefore, the nature of conflict and family processes would be different, altering the nature of protective and risk factors during adolescence.

Problem solving and communication skills appear to be significantly involved in family relationships with deficits in these skills resulting in conflict (Foster & Robin, 1998). Problem solving skills involve a sequence of steps needed to garner solutions to problems (D'Zurilla and Goldfriend, 1971). Utilizing effective problem solving skills within a family requires effective communication (Foster & Robin, 1989). Communication skills aid in discussion and problem solving, reciprocation of information, and affect emotions. A reciprocal relation exists as poor communication also interferes with effective problem solving (Foster & Robin, 1998).

Studies have demonstrated relations among poor problem solving skills, referral for mental health services (Robin, Koepke, & Moye, 1990) and parenting deficits (Rueter & Conger,

1995, as cited in Foster & Robin, 1998). Secondly, communication skills differences have been documented with nondistressed families being more likely to use humor, approval (Robin & Weiss, 1980), and supportiveness (Mann, Borduin, Henggeler, & Blaske, 1990). Distressed families appeared to engage in more commands, insults, conflict, and silence than nondistressed families (Robin & Weiss, 1980; Whittaker & Bry, 1991). Poor communication skills have been linked to aggression, poor academic achievement, social competence, depressive symptoms, and suicidal behavior (Reed & Dubow, 1997). Lastly, significant correlations between problem solving skills and communication skills have been detected empirically (Robin et al., 1990).

Family relationship factors, such as communication and problem solving skills, have been examined in youth with varying risk factors. Cohesion and communication with mother predicted outcome, including deviance, self-esteem, and grades, controlling for negative life events, in adolescents ages 14 years, but no interaction between cohesion, communication, and risk was demonstrated (Grossman et al., 1992). Poor communication and problem solving skills were shown in families of adolescent substance users (Hops, Tildesley, Lichtenstein, Ary, & Sherman, 1990). In the face of economic hardship, disruptions in parenting were associated with negative outcome in adolescent boys (Conger et al., 1992) and girls (Conger et al., 1993).

As mentioned previously, some family factors, such as family structure and cohesion, have been found to be moderators of the relation between community violence exposure and negative outcome. However, the results concerning family factors as moderators have been mixed (Miller et al., 1999) and few investigations have involved adolescents. The previous literature review illustrated the potential moderating influence of family communication and problem solving skills, but these factors have not been examined in a sample of adolescents exposed to community violence. This may be important as protective factors may not be global,

but specific to particular risk factors (Grossman et al., 1992). For instance, protective factors for adolescents in the face of parental psychopathology may be different from the protective factors for adolescents exposed to community violence. Lastly, no studies have examined the role of communication and problem solving skills as a moderator of positive outcome in adolescence.

In conclusion, considering family relationships in adolescence may be consequential due to developmental challenges particular to adolescence, including alterations in family functioning. Problem solving and communication skills have been demonstrated to be positively related to appropriate family interactions and negatively related to aggression, social competence, and internalizing problems. Family relationship skills, such as problem solving and communication skills, may be a significant protective factor for adolescents who have been exposed to community violence.

Summary and Purpose

Unfortunately, children and adolescents in the United States are exposed to alarmingly high rates of community violence exposure. Community violence exposure is associated with a plethora of adverse aftereffects, including symptoms of PTSD, depression, anxiety, and externalizing behaviors. However, there is little empirical understanding of various aspects of community violence exposure and their differential impact upon functioning. Research in this area has been limited by inconsistencies in conceptual and operational definitions of community violence exposure (Guterman et al., 2000). This investigation will attempt to address one limitation by separate consideration of the settings in which community violence exposure can occur, specifically, neighborhoods and schools.

Furthermore, greater understanding of compensatory and potentiating factors associated with community violence exposure is essential for effective clinical intervention and

preventative strategies. For instance, family factors, such as family violence exposure and parent-adolescent relationship skills, may function as moderators of the relation between positive and negative outcome in adolescents exposed to community violence. Both family violence exposure and poor parent-adolescent relationship skills have been associated with negative consequences, such as aggression, conflict, depression, and poor social competence. From an ecological/transactional perspective, both variables exacerbate risk in multi-stressed families and adolescents, or serve to promote resilience, or positive development, in the presence of community violence. Developmental differences that exist between children and adolescents underscore the need for separate evaluations of family factors as compensatory or potentiating factors for community violence exposure in children and adolescents.

The purpose of this study is to investigate the relations among community violence exposure, including neighborhood and school violence, family violence, parent-adolescent relationship skills, and positive and negative outcome. No hypotheses specific to neighborhood or school violence will be considered as there is little previous research investigating these arenas of community violence separately. There are four main hypotheses:

1. It is hypothesized that family violence exposure will moderate the relation between community violence exposure and psychological distress, including anxiety, depression, and social stress. Increased family violence exposure in adolescents with community violence exposure will be associated with greater psychological distress.
2. It is hypothesized that family violence exposure will moderate the relation between community violence exposure and positive, or adaptive outcome. Positive outcomes of interest include personal adjustment, such as self-esteem, self-reliance, and peer relations, adaptive skills, including parent-rated social skills, and adolescent conduct, specifically,

fewer risk behaviors, more health behaviors, and decreased association with deviant peers.

Decreased family violence exposure in adolescents who have been exposed to community violence will be associated with better personal adjustment, adaptive skills, and conduct. This is necessary, as few studies have investigated moderators of positive outcome, or resilience.

3. It is hypothesized that family communication and problem solving skills, as rated by the adolescent and parent, will moderate the relation between community violence exposure and positive outcome (i.e., personal adjustment, adaptive skills, and conduct). More positive family communication and problem solving skills in the families of adolescents with community violence exposure will be associated with greater personal adjustment, adaptive skills, and conduct. Again, this is an important focus of research due to the prevailing notion that resilience is not a rare phenomenon, but a commonality (Masten, 2001).
4. It is hypothesized that family communication and problems solving skills, as rated by the adolescent and parent, will moderate the association between community violence exposure and psychological distress. Less positive family communication and problem solving skills will be associated with greater psychological maladjustment in adolescents who have been exposed to community violence. Other family factors, such as parent-child conflict and family social support, have been investigated as potential moderators of the association of community violence exposure and negative outcomes, such as depressive symptoms and antisocial behavior, with mixed results.

Method

Participants

One hundred and fourteen adolescents between the ages of 13 and 20 and a parent participated in the investigation. Students were recruited from public schools and medical clinics that serve adolescents from high-crime neighborhoods in Baton Rouge, Louisiana. Students in grades 7 through 12 were recruited. In terms of participants excluded from the study, 14 adolescents or parents provided incomplete (missing more than 15% of data on one or more measures) or invalid data that was unusable, therefore, the analyses included data from 100 participant pairs. A power analysis had been conducted prior to data collection in which it was demonstrated that 90 participants would provide sufficient power for these analyses. The model included four covariates and eight predictors across three steps with a cumulative R-squared of .21. The power analysis revealed that, with a sample size of 100 participants, the study would have power of .87.

The sample was composed of 79 female (79%) and 21 male (21%) adolescents, ranging in age from 13 to 20 years, with a mean age of 16.08 ($SD = 1.38$). The sample was 92% African-American, 5% Caucasian, and 3% “other,” which included Asian-American and Hispanic. For family income, 64% of the sample reported yearly income of less than \$20,000. Mothers completed eighty-eight percent of parental packets. See Table 1 for details concerning demographic information.

Measures

Screen for Adolescent Violence Exposure (SAVE). The SAVE (Hastings & Kelley, 1997) is a 32-item, self-report scale assessing violence exposure for adolescents across three settings: school, home and neighborhood (See Appendix A). Additionally, three subscale scores

Table 1: Demographic Characteristics of the Sample

<u>Child age</u>	<u>Percentage of Sample</u>
13	1
14	15
15	16
16	28
17	27
18	11
20	2
<u>Child grade</u>	<u>Percentage of Sample</u>
7	2
8	2
9	20
10	14
11	38
12	34
<u>Family income</u>	<u>Percentage of Sample</u>
Under 10,000	32
11-20,000	32
21-30,000	10
31-40,000	11
41-50,000	4
above 50,000	5
<u>Relationship to child</u>	<u>Percentage of Sample</u>
Mother	88
Father	3
Grandmother	5
Other relative	2
<u>Who does the adolescent live with</u>	<u>Percentage of Sample</u>
Mother and father	24
Mother only	47
Mother and stepfather	10
Father and stepmother	1
Grandparent	9
Other relative	3

Traumatic Violence, Indirect Violence, and Physical/Verbal Aggression are provided for each setting. A five point Likert format was utilized for the SAVE. Scores for each setting range from 0 to 128, with higher scores reflecting greater violence exposure. The SAVE has been found to have good internal consistency, test-retest reliability, and validity (Hastings & Kelley, 1997). The Home subscales were used as a measure of family violence exposure, while the School and Neighborhood subscales were used as measures of community violence exposure.

Behavior Assessment System for Children- Parent Report (BASC-PRS) and the Self-Report of Personality (BASC-SRP). The BASC (Reynolds & Kamphaus, 1998) measures behavior and personality in children ages 4-18 years. The BASC was chosen due to the inclusion of validity scales which could be utilized to identify random or invalid responding and of scales measuring positive adjustment as rated by parents and the individual child or adolescent. The parent version of the BASC is comprised of 131 items and is available for three age groups including preschool, child, and adolescent. The adolescent form for children 12 to 18 years was used in this investigation. Parents rate their child on a 4-point scale from “Never” to “Almost Always.” There are three composite scores, including Externalizing Problems (Hyperactivity, Aggression, and Conduct Problems), Internalizing Problems (Anxiety, Depression, Somatization), and Adaptive Skills (Social Skills, Leadership). The Adaptive Skills composite was used in this study.

The BASC-SRP is a 186-item, self-report measure for children ages 8 to 11 years and ages 12 to 18 years. The form for adolescents ages 12 through 18 was utilized in this study. The adolescent form has 14 scales, which are rated on a “True/False” format and are organized into 3 composite scores and an overall composite score, the Emotional Symptoms Index. The authors also identified a SAD Triad, consisting of Anxiety, Depression, and Social Stress. The three

composite scores are Clinical Maladjustment (Anxiety, Atypicality, Locus of Control, Social Stress, Somatization), School Maladjustment (Attitude to School, Attitude to Teachers, Sensation Seeking), and Personal Adjustment (Interpersonal Relationships, Self-Esteem, Self-Reliance). The SRP includes ratings of maladaptive and adaptive items and three validity scales. The BASC-PRS and BASC-SRP have demonstrated adequate internal consistency, test-retest reliability, and validity (Reynolds & Kamphaus, 1998). The SAD Triad and Personal Adjustment composites were used in this investigation.

The Child Health and Illness Profile: Adolescent Edition (CHIP-AE). The CHIP-AE (Riley, Green, et al., 1998) is a 183-item, standardized self-report measure of health for adolescents 11 - 17 years of age. The CHIP-AE yields scores on 6 major domains (Satisfaction, Discomfort, Resilience, Risks, Disorders, and Achievement). Each major domain is further comprised of subdomains for which standard scores are calculated. Twenty subdomains are included in the scoring for the CHIP-AE. Extensive research has been conducted with the CHIP-AE, revealing excellent psychometric properties of the instrument and its domains and subdomains (Riley, Forrest, et al., 1998; Riley, Green, et al., 1998; Starfield et al., 1993). An abbreviated version of the CHIP-AE was utilized in the current study involving the domain of Risks (Threats to Achievement, Individual Risk Taking, and Peer Influences). Higher scores indicate that the adolescent engages in more positive health behaviors and fewer risk behaviors, and has fewer negative peer influences.

Parent-Adolescent Relationship Questionnaire (PARQ). The PARQ (Robin et al., 1990) is a measure of the relationship between parents and adolescents ages 10 to 19 years. There are two forms of the measure, the parent form with 250 items and the adolescent form with 284 items. Factor analysis revealed three overall factors, Skills/Overt Distress, Beliefs/Expectations,

and Family Structure with 16 subscales. Research on the psychometric properties of the PARQ revealed good internal consistency, test-retest reliability, and validity. For instance, the Skills and Beliefs subscales were found to differentiate between distressed families and non-distressed families. The Communication and Problem Solving Skills subscales were used as a measure of parent and adolescent communication and problem solving skills. The subscale is reverse scored, with higher scores indicating fewer positive communication and problem solving skills.

Demographic Questionnaire. A demographic information form gathered pertinent data concerning participants including the age, gender and grade level of the adolescent and age, parental marital status, education level, occupation, and income level of parents/guardians (See Appendix B).

Procedure

Adolescents and their parents were recruited through local schools and medical clinics. Informed consent was obtained from parents/guardians and assent obtained from adolescents prior to participation. Adolescents completed a packet of questionnaires containing the SAVE, BASC-SRP, CHIP-AE, and PARQ (See Table 2 for details). The questionnaires were completed independently, or with the assistance of an experimenter, depending upon the request of the adolescent. The parents/guardians completed the BASC-PRS, PARQ and demographic questionnaire (See Table 2). Parental and adolescent responses were anonymous and packets were coded to match parent and adolescent data. Following completion of the questionnaires, participants were debriefed regarding the purposes of the study. At this time, participants were allowed the opportunity to ask questions about the study and the measures that they completed and were provided with referral cards if participants were interested. All adolescents were compensated \$5 for their participation.

Table 2: Predictor, Moderator, and Outcome Variables

Measure	Description of Measure
BASC-SRP SAD Triad	adolescent-rated social stress, anxiety, depression
BASC-PRS Adaptive Skills	parent-rated social skills, leadership
BASC-SRP Personal Adjustment	adolescent-rated interpersonal relations, self-esteem, self-reliance
CHIP-AE Risks	adolescent-rated threats to achievement, individual risk taking, peer influences
PARQ-Parent Form	parent-rated communication and problem solving skills
PARQ-Adolescent Form	adolescent-rated communication and problem solving skills
SAVE	adolescent-rated neighborhood, school, and family violence exposure

Note. BASC-SRP = Behavior Assessment for Children, Self-Report of Personality; BASC-PRS = Behavior Assessment for Children, Parent Report; CHIP-AE = Child Health and Illness Profile-Adolescent Edition; PARQ = Parent Adolescent Relationship Questionnaire; SAVE = Screen for Adolescent Violence Exposure.

Results

Description of Community Violence Exposure

The frequencies of endorsement of SAVE items and the corresponding subscales were examined to assess the rates of community violence exposure. The percentage of participants who rated the select item as occurring “sometimes” or greater is presented in Table 3. For Traumatic Violence, Physical/Verbal Aggression, and Indirect Violence, numbers presented represent the percentage of participants who endorsed any item on the subscale as occurring “sometimes” or greater.

Table 3: Frequency of Endorsement of “Sometimes” or Greater for SAVE Items and Subscales

	Home	School	Neighborhood
Traumatic Violence	29%	44%	64%
Someone pulled a gun on me	0%	3%	5%
I have been shot	1%	0%	0%
I have seen someone get killed	0%	0%	9%
Someone has pulled a knife on me	2%	4%	5%
I have had shots fired at me	2%	2%	7%
I have seen someone get shot	5%	3%	16%
I have been attacked with a knife	2%	1%	6%
I have seen someone pull a gun on someone else	5%	6%	29%
I have seen someone pull a knife on someone else	11%	13%	24%
I have been badly hurt	7%	6%	9%
I have seen someone attacked with a knife	4%	5%	13%
I have seen someone get badly hurt	15%	30%	47%
Physical/Verbal Aggression	56%	48%	27%
Grownups beat me up	2%	1%	1%
Someone my age has threatened to beat me up	5%	21%	15%
Someone my age hits me	8%	8%	4%
Grownups threaten to beat me up	2%	2%	2%
Grownups scream at me	38%	21%	11%
Grownups hit me	7%	1%	1%

(Table continued)

(Table continued)

Indirect Violence	90%	96%	98%
I have seen someone carry a gun	15%	9%	55%
I have seen the police arrest someone	23%	50%	69%
I have seen a grownup hit a kid	36%	22%	59%
I have heard about someone getting shot	37%	55%	66%
I have seen someone carry a knife	16%	31%	40%
I have seen a kid hit a grownup	11%	17%	29%
I have seen people scream at each other	54%	78%	81%
I have seen someone get beaten up	22%	81%	63%
I have heard about someone getting killed	36%	57%	82%
I have heard about someone getting attacked with a knife	17%	38%	38%
I have heard about someone getting beaten up	36%	80%	72%
I hear gunshots	27%	14%	61%
I have run for cover when people started shooting	9%	9%	33%
I have heard of someone carrying a gun	16%	24%	44%

Setting Differences

Setting differences were investigated with one-way within-subjects MANOVAs with the factor being setting and the dependent variable being the particular SAVE score. Significant multivariate tests were followed by paired samples t-tests. For overall SAVE scores, the results of the MANOVA indicated a significant setting effect, Wilks' $\lambda = .49$, $F(2, 98) = 50.78$, $p < .001$. Participants endorsed more violence exposure in the neighborhood setting ($M = 32.42$, $SD = 21.27$) than in the home ($M = 16.12$, $SD = 15.73$), $t(100) = -10.13$, $p < .001$, and school settings ($M = 22.23$, $SD = 14.83$), $t(100) = -7.25$, $p < .001$. Participants also reported more violence exposure in the school setting compared to the home $t(100) = 5.34$, $p < .001$. For Traumatic Violence exposure, the results of the MANOVA indicated a significant setting effect, Wilks' $\lambda = .69$, $F(2, 98) = 22.25$, $p < .001$. Participants endorsed more violence exposure in the neighborhood setting ($M = 5.36$, $SD = 6.55$) than in the home ($M = 1.85$, $SD = 3.76$), $t(100) = -6.65$, $p < .001$, and school settings ($M = 2.28$, $SD = 3.63$), $t(100) = -5.97$, $p < .001$. For Physical/Verbal Aggression, the results of the MANOVA indicated a significant setting effect,

Wilks' $\lambda = .82$, $F(2, 98) = 10.73$, $p < .001$. Participants endorsed less violence exposure in the neighborhood setting ($M = 1.24$, $SD = 2.24$) than in the home ($M = 2.16$, $SD = 2.28$), $t(100) = -6.65$, $p < .001$, and school settings ($M = 1.88$, $SD = 2.19$), $t(100) = -5.97$, $p < .001$. For Indirect Violence, the results of the MANOVA indicated a significant setting effect, Wilks' $\lambda = .44$, $F(2, 98) = 62.59$, $p < .001$. Participants endorsed more violence exposure in the neighborhood setting ($M = 25.81$, $SD = 15.19$) than in the home ($M = 12.11$, $SD = 11.87$), $t(100) = -11.24$, $p < .001$, and school settings ($M = 18.08$, $SD = 11.06$), $t(100) = -7.74$, $p < .001$. Participants also reported more violence exposure in the school setting compared to the home $t(100) = 6.81$, $p < .001$.

Correlational Analyses

Bivariate correlations between the predictor variables, outcome variables, and control variables were conducted and are presented in Table 4. The SAD Triad was correlated positively and significantly with neighborhood, school, and family violence exposure, parent-rated communication/problem solving skills, and adolescent-rated communication/problem solving skills. Increased violence exposure in all settings and decreased family skills were related to increased anxiety, depression, and social stress, as rated by the adolescent. Adaptive Skills were correlated negatively and significantly with adolescent-rated skills and parent-rated skills, while Personal Adjustment was correlated positively and significantly with school violence exposure. More positive family communication/problem solving skills, as rated by the adolescent and parent, were linked to increased adaptive skills, as rated by the parent. Increased school violence exposure was linked to increased personal adjustment, as rated by the adolescent. Lastly, Risks was correlated negatively with school, neighborhood, and family violence exposure and adolescent and parent skills. Increased violence exposure in all settings and positive parent and

adolescent-rated skills were related inversely to decreased risk behaviors and association with deviant peers.

Table 4: Correlation Matrix of the Criterion Variables, Predictor Variables, and Control Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	-	-.03	-.04	-.07	-.04	-.01	.01	.17	.26	-.14	-.16	-.11
2. Income		-	.36*	-.04	-.04	.01	.20*	.01	-.10	-.11	-.16	.03
3. Parent education			-	-.04	-.12	-.08	.15	-.05	.07	-.05	-.07	.06
4. School Violence Exposure				-	.78*	.71*	.13	.15	.23*	.09	.25*	-.35*
5. Neighborhood Violence Exposure					-	.67*	.22*	.16	.26*	.09	.09	-.46*
6. Family Violence Exposure						-	.30*	.25*	.37*	-.07	.07	-.37*
7. Adolescent Skills							-	.49*	.37*	-.31*	-.07	-.28*
8. Parent Skills								-	.44*	-.43*	-.15	-.18
9. SAD Triad									-	-.30*	.05	-.23*
10. Adaptive Skills										-	.23*	.13
11. Personal Adjustment											-	.02
12. Risks												-

Note. * $p < .05$.

Data Analyses

Hierarchical regression analyses were conducted to determine whether family violence exposure and family skills moderate the relations among various forms of community violence exposure (neighborhood and school violence exposure) and the outcome variables. Separate analyses were conducted for family violence exposure and for family skills with each criterion variable. Prior to data analyses, the predictor variables were centered to prevent the negative impact of multicollinearity, as recommended by Aiken and West (1991). The mean was subtracted from each individual scale score in order to create variables with means of zero. These centered predictors were then multiplied to create the interaction term. Multivariate outliers were examined using Mahalanobis Distance and excluded from the appropriate analyses (Tabachnick

& Fidell, 2001). There were two outliers excluded from the each analysis based on a significance of $p < .001$. There were no univariate outliers excluded from the analyses.

First, four hierarchical regression analyses were calculated investigating family violence exposure as a moderator of the relation between community violence exposure and each outcome variable, SAD Triad, Adaptive Skills, Personal Adjustment, and Risks. For each regression analysis, demographic variables (age, gender, income, and parent education) were entered on the first step to control for their effects. In step two, the main effects of School Violence Exposure (SVE), Neighborhood Violence Exposure (NVE), and Family Violence Exposure (FVE) were entered. Two-way interactions between the potential moderator (FVE), SVE, and NVE were entered on step three.

Second, four hierarchical regressions were calculated investigating family relationship skills, as measured by Adolescent-rated Communication/Problem Solving Skills (AS) and Parent-rated Communication/Problem Solving Skills (PS), as potential moderators of the relation between community violence exposure and each outcome variable, SAD Triad, Adaptive Skills, Personal Adjustment, and Risks. Demographic variables were entered on the first step. For these equations, AS, PS, NVE, and SVE were entered on the second step. The interactions of AS and NVE, AS and SVE, PS and NVE, and PS and SVE were entered on the third step.

Significant interactions, which were identified in the regression analyses, were examined using simple slope analyses and plots. Post-hoc probing with t-tests of the significant interactions was conducted to determine which of the simple slopes was significantly different from zero. This procedure allows the investigator to determine under which condition of the moderator the interaction is significant. Plots were created by solving the regression equation at specific levels

of the moderator variable, particularly one standard deviation above and below the mean (Aiken & West, 1991; Holmbeck, 2002; Tabachnick & Fidell, 2001).

Regression Analyses with Family Violence Exposure as a Moderator

In the regression equation in which the SAD Triad was the criterion variable, the model was significant (See Table 5). Age, gender, income, and parent education together were not significant predictors on the first step. School Violence Exposure (SVE), Neighborhood Violence Exposure (NVE), and Family Violence Exposure (FVE) were entered on the second step and, taken together, were significant [$F(7,86) = 2.79, p < .02$]. The interactions between SVE and FVE and NVE and FVE were entered on the third step, and, taken together, the third step was significant [$F(9,84) = 2.54, p < .02$]. These results revealed that 21% of the variance in the SAD Triad was accounted for by these variables. Examination of the variables within the third block revealed that FVE was a significant predictor ($B = .56, p < .01$), such that greater family violence exposure was related to greater depression, anxiety, and social stress. Income was also a significant predictor ($B = -.44, p < .05$), such that less income was related to more depression, anxiety, and social stress.

Table 5: Hierarchical Regression Analysis Evaluating the Moderating Effects of Family Violence Exposure on the SAD Triad

Variable	Step One		Step Two		Step Three	
	<i>B</i>	β	<i>B</i>	β	<i>B</i>	β
Age	.02	.009	-.04	-.02	-.09	-.05
Gender	.11	.02	.48	.08	.63	.10
Income	-.27	-.15	-.33	-.19	-.44*	-.24*
Parent Ed	.18	.10	.26	.15	.31	.17

(Table continued)

(Table continued)

SVE	-.41	-.25	-.49	-.30
NVE	.20	.15	.29	.22
FVE	.63*	.47*	.56*	.42*
SVE x FVE			-.06	-.001
NVE x FVE			.12	.19

Note. $R^2 = .02$ for Step 1; $\Delta R^2 = .16^*$ for Step 2; $\Delta R^2 = .03$ for Step 3. $*p < .05$. SAD Triad = BASC-SRP Anxiety, Depression, and Social Stress; SVE = School Violence Exposure; NVE = Neighborhood Violence Exposure; FVE = Family Violence Exposure.

In the regression equation in which Adaptive Skills was the criterion variable, the model was not significant (See Table 6). Age, gender, income, and parent education together were not significant predictors on the first step. SVE, NVE, and FVE were entered on the second step and, taken together, were not significant. The interactions between SVE and FVE and NVE and FVE were entered on the third step, and, taken together, the third step was not significant.

Table 6: Hierarchical Regression Analysis Evaluating the Moderating Effects of Family Violence Exposure on Adaptive Skills

Variable	Step One		Step Two		Step Three	
	<i>B</i>	β	<i>B</i>	β	<i>B</i>	β
Age	-.20	-.15	-.16	-.12	-.16	-.12
Gender	-.36	-.08	-.56	-.12	-.56	-.12
Income	-.21	-.16	-.18	-.14	-.18	-.14
Parent Ed	-.02	-.02	-.02	-.02	-.02	-.02
SVE			.20	.17	.20	.16
NVE			.13	.13	.13	.13

(Table continued)

(Table continued)

FVE	-0.29	-0.29	-0.29	-0.29
SVE x FVE			-0.06	-0.01
NVE x FVE			.01	.01

Note. $R^2 = .05$ for Step 1; $\Delta R^2 = .04$ for Step 2; $\Delta R^2 = .001$ for Step 3. Adaptive Skills = BASC-PRS Social Skills and Leadership; SVE = School Violence Exposure; NVE = Neighborhood Violence Exposure; FVE = Family Violence Exposure.

In the regression equation in which Personal Adjustment was the criterion variable, the model was not significant (See Table 7). Age, gender, income, and parent education together were not significant predictors on the first step. SVE, NVE, and FVE were entered on the second step and, taken together, were not significant. The interactions between SVE and FVE and NVE and FVE were entered on the third step, and, taken together, the third step was not significant.

Table 7: Hierarchical Regression Analysis Evaluating the Moderating Effects of Family Violence Exposure on Personal Adjustment

Variable	Step One		Step Two		Step Three	
	<i>B</i>	β	<i>B</i>	β	<i>B</i>	β
Age	-0.30	-0.22	-0.25	-0.19	-0.27	-0.20
Gender	1.2	.26	1.0	.22	1.1	.24
Income	-0.09	-0.06	-0.05	-0.04	-0.10	-0.07
Parent Ed	-0.06	-0.04	-0.07	-0.06	-0.07	-0.05
SVE			.43	.36	.40	.33
NVE			-0.18	-0.18	-0.15	-0.15
FVE			-0.07	-0.07	-0.06	-0.06
SVE x FVE					-0.08	-0.16

(Table continued)

(Table continued)

NVE x FVE

.09

.19

Note. $R^2 = .12$ for Step 1; $\Delta R^2 = .05$ for Step 2; $\Delta R^2 = .006$ for Step 3. $*p < .05$. Personal Adjustment = BASC-SRP Interpersonal Relations, Self-Esteem, and Self-Reliance; SVE = School Violence Exposure; NVE = Neighborhood Violence Exposure; FVE = Family Violence Exposure.

With Risks as the criterion variable (See Table 8), age, gender, income, and parent education together were not significant predictors on the first step. SVE, NVE, and FVE were entered on the second step and, taken together, were significant [$F(7,90) = 3.65, p < .01$]. The interactions between SVE and FVE and NVE and FVE were entered on the third step, and, taken together, the third step was significant [$F(9,88) = 3.66, p < .01$]. These results revealed that 27% of the variance in Risks was accounted for by these variables. Examination of the variables within the third block revealed that NVE was a significant predictor, such that greater neighborhood violence exposure was related to fewer health behaviors and more risky behavior ($B = -3.26, p < .01$). This main effect was negated as the interactions of home and school violence ($B = 2.0, p < .02$) and of home and neighborhood violence ($B = -1.74, p < .02$) were significant. These interactions are illustrated in Figures 1 and 2.

Follow-up simple slope analyses were conducted for each interaction. For the interaction involving SVE and FVE, analyses revealed that the interaction was significant at higher levels of FVE, $t(98) = 2.36, p < .02$, but not at lower levels of FVE, $t(98) = -1.12, p > .05$. The plot of SVE and FVE revealed that adolescents with higher levels of family violence exposure had fewer conduct problems, decreased health risk behaviors, and fewer deviant peer influences as school violence exposure increased. The relation between SVE and Risks was not significant at lower levels of FVE.

For the interaction involving NVE and FVE, analyses revealed that the interaction was significant at higher levels of FVE, $t(98) = -3.43, p < .001$, but not at lower levels of FVE, $t(98) = .02, p > .05$. The plot of NVE and FVE demonstrated that adolescents with high family violence exposure were at greatest risk for increased health risk behaviors, delinquent behavior, and association with deviant peers as neighborhood violence exposure increased. There was no relation between neighborhood violence exposure and Risks at low levels of family violence exposure.

Table 8: Hierarchical Regression Analysis Evaluating the Moderating Effects of Family Violence Exposure on Risks

Variable	Step One		Step Two		Step Three	
	<i>B</i>	β	<i>B</i>	β	<i>B</i>	β
Age	-.88	-.09	-.89	-.09	-.67	-.07
Gender	-2.9	-.09	-3.2	-.10	-4.89	-.15
Income	-.48	-.05	-.30	-.03	.37	.04
Parent Ed	-.59	-.06	-.10	.01	.14	.02
SVE			.94	.11	1.56	.19
NVE			-2.84*	-.42*	-3.26*	-.48*
FVE			-1.1	-.16	-1.65	-.24
SVE x FVE					1.96*	.25*
NVE x FVE					-1.75*	-.24*

Note. $R^2 = .03$ for Step 1; $\Delta R^2 = .21^*$ for Step 2; $\Delta R^2 = .03$ for Step 3. $*p < .05$. Risks = CHIP-AE Threats to Achievement, Individual Risk Taking, and Peer Influences; SVE = School Violence Exposure; NVE = Neighborhood Violence Exposure; FVE = Family Violence Exposure.

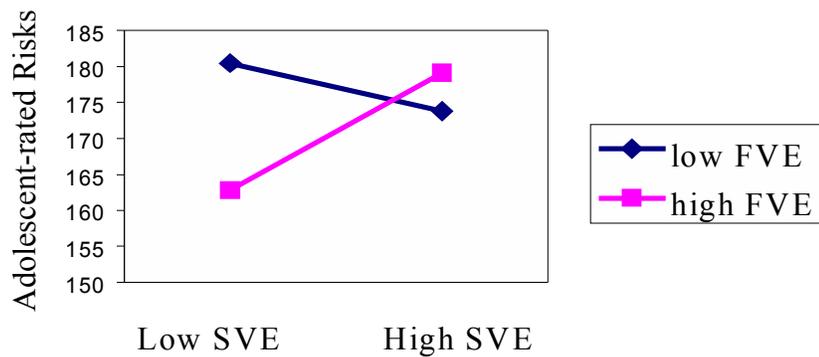


Figure 1: Interaction Effect of School Violence Exposure and Family Violence Exposure in the Prediction of Risks

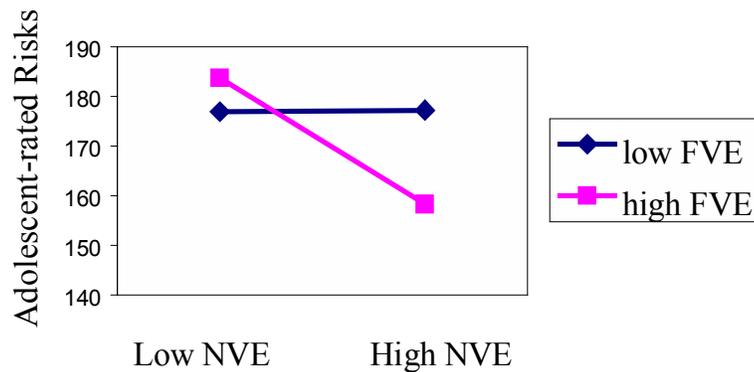


Figure 2: Interaction Effect of Neighborhood Violence Exposure and Family Violence Exposure in the Prediction of Risks

Regression Analyses with Parent-rated Skills and Adolescent-rated Skills as Moderators

With the SAD Triad as a criterion variable (See Table 9), age, gender, income, and parent education together were not significant predictors on the first step. School Violence Exposure (SVE), Neighborhood Violence Exposure (NVE), Parent-Rated Communication/Problem Solving Skills (PS), and Adolescent-Rated Communication/Problem Solving Skills (AS) were entered on the second step and, taken together, were significant [$F(8,80) = 4.49, p < .01$]. The interactions were entered on the third step, and, taken together, the third step was significant

[$F(12,76) = 3.56, p < .01$]. These results revealed that 36% of the variance in the SAD Triad was accounted for by these variables. Examination of the variables within the third block revealed that Parent Skills were a significant predictor ($B = .14, p < .01$), such that more negative family skills, as indicated by the parent, were associated with greater anxiety, depression, and social stress. Adolescent Skills were a significant predictor ($B = .11, p < .05$), such that more negative adolescent-rated skills were associated with greater anxiety, depression, and social stress. One interaction was significant ($B = .12, p < .05$), the interaction of SVE and AS (See Figure 3).

Follow-up simple slope analyses were conducted for the interaction between SVE and AS. Analyses revealed that the interaction was significant at higher levels of AS, $t(98) = 2.27, p < .03$, but not at lower levels of AS, $t(98) = -1.08, p > .05$. The plot of School Violence Exposure x Adolescent Skills interaction revealed that, adolescents with more negative family skills, as rated by the adolescent, had more problems with anxiety, depression, and social stress as school violence exposure increased. There was no relation between school violence exposure and psychological distress at more positive levels of adolescent-rated communication/problem solving skills.

Table 9: Hierarchical Regression Analysis Evaluating the Moderating Effects of Parent-rated Skills and Adolescent-rated Skills on the SAD Triad

Variable	Step One		Step Two		Step Three	
	<i>B</i>	β	<i>B</i>	β	<i>B</i>	β
Age	.03	.02	-.06	-.04	-.20	-.11
Gender	.27	.04	-.07	-.01	-.10	-.02
Income	-.22	-.12	-.39	-.21	-.40	-.21
Parent Ed	-.17	.09	.26	.14	.28	.16

(Table continued)

(Table continued)

SVE	.08	.05	.14	.08
NVE	.19	.14	.17	.13
Parent-rated Skills	.14*	.33*	.14*	.34*
Adolescent-rated Skills	.09	.21	.11*	.25*
SVE x AS			.12*	.34*
NVE x AS			-.06	-.23
SVE x PS			.08	-.35
NVE x PS			.04	.21

Note. $R^2 = .02$ for Step 1; $\Delta R^2 = .29^*$ for Step 2; $\Delta R^2 = .05$ for Step 3. $*p < .05$. SAD Triad = BASC-SRP Anxiety, Depression, and Social Stress; SVE = School violence exposure; NVE = Neighborhood violence exposure; AS = Adolescent-rated skills; PS = Parent-rated skills.

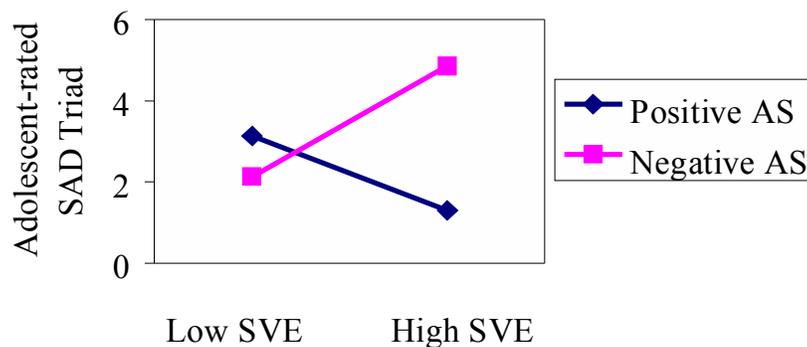


Figure 3: Interaction Effect of School Violence Exposure and Adolescent-rated Skills in the Prediction of the SAD Triad

With Adaptive Skills as a criterion variable (See Table 10), age, gender, income, and parent education together were not significant predictors on the first step. SVE, NVE, PS, and AS were entered on the second step and, taken together, were significant [$F(8,81) = 4.62, p < .01$]. The interactions were entered on the third step, and, taken together, the third step was

significant [$F(12,77) = 3.35, p < .01$]. These results revealed that 34% of the variance in Adaptive Skills was accounted for by these variables. Examination of the variables within the third block revealed that Parent Skills was a significant predictor ($B = -.90, p < .02$), such that more positive parent-rated skills were related to greater adaptive skills. Adolescent Skills was a significant predictor ($B = -.10, p < .02$), such that more positive adolescent-rated skills were associated with greater adaptive skills.

Table 10: Hierarchical Regression Analysis Evaluating the Moderating Effects of Parent-rated Skills and Adolescent-rated Skills on Adaptive Skills

Variable	Step One		Step Two		Step Three	
	<i>B</i>	β	<i>B</i>	β	<i>B</i>	β
Age	-.15	-.11	-.02	-.01	.03	.002
Gender	-.43	-.10	-.39	-.09	-.38	-.09
Income	-.26	-.19	-.13	-.10	-.18	-.14
Parent Ed	-.02	-.02	-.04	-.03	-.05	-.04
SVE			.15	.13	.09	.07
NVE			.11	.11	.19	.20
Parent-rated Skills			-.10*	-.35*	-.09*	-.30*
Adolescent-rated Skills			-.08*	-.26*	-.10*	-.30*
SVE x AS					-.05	-.21
NVE x AS					.06	.28
SVE x PS					.01	.06
NVE x PS					-.09	-.06

Note. $R^2 = .05$ for Step 1; $\Delta R^2 = .26^*$ for Step 2; $\Delta R^2 = .03$ for Step 3. $*p < .05$. Adaptive Skills = BASC-PRS Social Skills and Leadership; SVE = School violence exposure; NVE = Neighborhood violence exposure; AS = Adolescent-rated skills; PS = Parent-rated skills.

With Personal Adjustment as a criterion variable (See Table 11), age, gender, income, and parent education together were significant predictors on the first step [$F(4, 83) = 2.856, p < .03$]. SVE, NVE, PS, and AS were entered on the second step and, taken together, were significant [$F(8,79) = 2.41, p < .03$]. The interactions were entered on the third step, and, taken together, the third step was significant [$F(12,75) = 2.00, p < .04$]. These results revealed that 24% of the variance in Personal Adjustment was accounted for by these variables. Examination of the variables within the third block revealed that gender was a significant predictor ($B = 1.2, p < .02$), such that being female was related to greater Personal Adjustment. SVE was a significant predictor ($B = .46, p < .03$), such that more school violence exposure was associated with greater Personal Adjustment.

Table 11: Hierarchical Regression Analysis Evaluating the Moderating Effects of Parent-rated Skills and Adolescent-rated Skills on Personal Adjustment

Variable	Step One		Step Two		Step Three	
	<i>B</i>	β	<i>B</i>	β	<i>B</i>	β
Age	-.29*	-.21*	-.22	-.16	-.24	-.18
Gender	1.4*	.29*	1.1*	.25*	1.2*	.27*
Income	-.05	-.04	.001	.001	-.004	-.03
Parent Ed	-.04	-.03	-.09	-.07	-.03	-.02
SVE			.46	.38	.46*	.38*
NVE			-.21	-.21	-.14	-.14
Parent-rated Skills			-.05	-.17	-.04	-.10
Adolescent-rated Skills			.003	.008	-.01	-.04
SVE x AS					.03	.12

(Table continued)

(Table continued)

NVE x AS	.03	.15
SVE x PS	.08	.05
NVE x PS	-.04	-.24

Note. $R^2 = .12^*$ for Step 1; $\Delta R^2 = .08$ for Step 2; $\Delta R^2 = .05$ for Step 3. * $p < .05$. Personal Adjustment = BASC-SRP Interpersonal Relations, Self-Esteem, and Self-Reliance; SVE = School violence exposure; NVE = Neighborhood violence exposure; AS = Adolescent-rated skills; PS = Parent-rated skills.

With Risks as a criterion variable (See Table 12), age, gender, income, and parent education together were not significant predictors on the first step. SVE, NVE, PS, and AS were entered on the second step and, taken together, were significant [$F(8,81) = 3.61, p < .01$]. The interactions were entered on the third step, and, taken together, the third step was significant [$F(12,77) = 3.20, p < .01$]. These results revealed that 33% of the variance in Risks was accounted for by these variables. Examination of the variables within the third block revealed that NVE was a significant predictor ($B = -3.9, p < .01$), such that less neighborhood violence exposure was associated with fewer risk behaviors, better conduct, and less association with deviant peers.

Table 12: Hierarchical Regression Analysis Evaluating the Moderating Effects of Parent-rated Skills and Adolescent-rated Skills on Risks

Variable	Step One		Step Two		Step Three	
	<i>B</i>	β	<i>B</i>	β	<i>B</i>	β
Age	-1.3	-.14	-1.4	-.15	-1.1	-.11
Gender	-2.3	-.07	-.99	-.03	-.39	-.01
Income	.26	.03	.67	.07	1.4	.15

(Table continued)

(Table continued)

Parent Ed	.73	.08	.18	.02	.46	.05
SVE			.51	.06	.98	.12
NVE			-3.01*	-.48*	-3.9*	-.61*
Parent-rated Skills			-.16	-.08	-.35	-.17
Adolescent-rated Skills			-.14	-.07	-.07	-.03
SVE x AS					.34	.19
NVE x AS					-.36	-.26
SVE x PS					.40	.33
NVE x PS					-.20	-.21

Note. $R^2 = .04$ for Step 1; $\Delta R^2 = .22^*$ for Step 2; $\Delta R^2 = .07$ for Step 3. $*p < .05$. Risks = CHIP-AE Threats to Achievement, Individual Risk Taking, and Peer Influences; SVE = School violence exposure; NVE = Neighborhood violence exposure; AS = Adolescent-rated skills; PS = Parent-rated skills.

Discussion

The central purpose of the present study was to investigate family violence exposure and family communication/problem solving skills as moderators of the relations among community violence exposure and various outcome variables, including adaptive skills, personal adjustment, psychological distress, and conduct. Previous literature has documented an association between community violence exposure and various psychological difficulties, such as PTSD (Berman et al., 1996), anxiety (Cooley-Quille et al., 2001), depression (DuRant et al., 1995), and aggressive behavior (Gorman-Smith & Tolan, 1998). Nonetheless, exposure to community violence does not guarantee deleterious outcomes in all children and adolescents, although little research concerning resilience has been conducted within this population (Osofsky, 1999). From an ecological/transactional model, family violence exposure and parent-adolescent relationship skills may intensify risk or promote positive adaptation in the presence of the stressors of neighborhood and school violence exposure (Lynch & Cicchetti, 1998).

Rates of Violence Exposure

Unfortunately, high rates of community violence exposure were identified in this sample of predominately African-American adolescents. Specifically, 64% of the participants reported that “someone pulled a gun on me” in the neighborhood setting and 30% had seen someone badly hurt in the school setting. Violence exposure within the home also appeared to be high, although less widespread than violence within the community. For instance, 11% of these adolescents had seen someone pull a knife on someone and 15% of participants had seen someone hurt badly in their homes. These rates appeared congruent with previous literature investigating community violence exposure and family violence exposure (e.g., Flowers et al., 2000; Miller et al., 1999; O’Keefe, 1997; Overstreet & Braun, 1999).

Research in this area has been plagued with inconsistent definitions and methodology, limiting the generalization of many findings. Many previous studies did not delineate the setting in which the violence exposure occurred or combined violence within the community with violence within the home (Guterman et al., 2000). Therefore, this study examined community violence in particular settings, especially the neighborhood and school settings, and separated community from home violence exposure. Results revealed that adolescents report violence exposure across settings in the community and within their homes. Overall, rates of violence exposure were highest in the neighborhood, followed by the school, and then the home settings. Divergent patterns appeared across severity of violence exposure. Adolescents endorsed more traumatic violence exposure, including serious assaults with weapons, and more indirect violence exposure, including hearing gunshots and witnessing arrests, in the neighborhood setting, than in the school and home setting. However, adolescents recounted more physical and verbal aggression at home and at school compared to the neighborhood arena. No significant differences were found for exposure to traumatic violence and physical/verbal aggression in the home and school settings. These comparisons of various forms of violence exposure across community settings extend the literature as rates of exposure may vary according to setting and severity of the violence witnessed and experienced (Guterman et al., 2000).

Family Violence Exposure

Overall, results were mixed concerning the moderating impact of family violence exposure upon outcome in adolescents exposed to community violence within the school and neighborhood settings. The hypothesis regarding the moderating impact of family violence exposure was supported for adolescent-rated conduct or risk behaviors, but the impact was dissimilar for neighborhood and school violence exposure. For neighborhood violence exposure,

there was no relation between neighborhood violence exposure and risk behaviors at low levels of family violence exposure. However, there was an inverse association between neighborhood violence exposure and risk behavior, including delinquent behavior, health risk behaviors, and association with deviant peers, at high levels of family violence exposure. These results indicate that family violence exposure is a potentiating factor within the environments of adolescents exposed to neighborhood violence. Contrarily, low levels of family violence exposure appeared to protect adolescents against the deleterious impact of neighborhood violence exposure, signified by the lack of relation between neighborhood violence and risk behavior at low levels of family violence exposure. This moderating effect of family violence exposure may have treatment implications, as decreasing family violence may protect adolescents from the negative impact of neighborhood violence, or, at least, decrease the association between high levels of neighborhood violence exposure and negative risk behaviors. This finding appears to support previous hypotheses regarding the interaction between neighborhood violence exposure and family violence exposure (Osofsky et al., 1993). According to the ecological/transactional model, these two negative factors act concordantly to exacerbate their negative impact upon development (Cicchetti & Lynch, 1993). Families with high levels of conflict and other stressors, such as neighborhood violence exposure, may have ineffectual parent monitoring, which contributes to the initiation of problem behavior in the adolescent (Ary et al., 1999).

The moderating influence of family violence exposure in the relation between school violence exposure and risk behaviors also was supported. Again, the relation between school violence exposure and risk behaviors was not significant at low levels of family violence exposure. Contrary to the previous finding with neighborhood violence, at high levels of family violence exposure, there was a positive link between school violence exposure and risk

behaviors. At high levels of family violence exposure, increased school violence exposure was related to less drug use, less risky sexual behavior, less delinquent behavior, and fewer negative peer influences. This is a surprising finding which appears counterintuitive, particularly in light of the relation between neighborhood violence exposure and risk behavior.

Researchers have hypothesized that school violence may be distinctive from other forms of violence within the community, especially neighborhood violence (Flaherty, 2001). Although school violence appears to be increasing, survey data has indicated that more minor violence occurs in the school setting, whereas more major crimes and physical assaults occur in the neighborhood (Elliot, Hamburg, & Williams, 1998). However, adolescents may feel most unsafe within their schools. A 1995 Gallup poll revealed that adolescents felt most safe at home, then in their neighborhoods, and then at school (Elliot et al., 1998). Adolescents are required to spend a considerable part of their day with other adolescents (Flaherty, 2001), and many experience this frequent contact with peers without adequate adult supervision. Moreover, violence within the schools tends to be of an interpersonal nature (Laub & Lauritsen, 1998). Therefore, adolescents may develop a different response to the combination of school and family violence exposure than neighborhood and family violence exposure. Adolescents experiencing school and family violence may become overwhelmed by violence in areas of their lives from which they cannot escape, their home and their school. These adolescents may withdraw from peers, limiting their opportunities to engage in sex, delinquent behavior, or association with deviant peers. Accordingly, researchers have found that perceptions of safety mediate the relation between community violence exposure and PTSD in children (Overstreet & Braun, 2001), which may support these speculations. Alternatively, these adolescents may attempt to reduce their personal victimization in a highly violent school by avoiding delinquent peers and avoiding high risk

situations and high risk behaviors. Instead of withdrawal due to symptoms of posttraumatic stress, these adolescents could actively withdraw to avoid future victimization, demonstrating the highest potential for resilience (Masten, 2001).

Contrarily, researchers have proposed that considerable violence exposure leads to desensitization (Cooley-Quille et al., 2001; Farrell & Bruce, 1997; Osofsky et al., 1993). The combination of school and family violence, in inescapable environments, may lead to these adolescents viewing violence as a matter of course, and garner little reaction. In support, Cooley-Quille and colleagues (2001) recently demonstrated that adolescents exposed to high rates of community violence had lower resting heart rates following the viewing of a violent film, compared to adolescents with lower rates of exposure. However, this methodology did not separate the impact of neighborhood and school violence exposure.

Further replication of this finding is needed due to its surprising nature; hence, these hypotheses are mere conjecture at this stage of research. Many adolescents with high violence exposure in the family and school arenas may have dropped out of school and, accordingly, not been sampled in this study, biasing these results. Additionally, the participants were mostly female, which could also impact these results. Interestingly, other apparently counterintuitive findings have been demonstrated in investigations of potential moderators of the relations among community violence exposure, antisocial behavior, and academic achievement (Gorman-Smith & Tolan, 1998; Miller et al., 1999; Overstreet & Braun, 1999), revealing that processes may function differently in families with community violence exposure. For instance, children, residing in high crime neighborhoods, with less parental supervision and monitoring, had higher ratings of social skills and peer relations and higher language achievement scores than

supervised children. The authors considered the directionality of this finding, remarking that only children who are performing well are left unsupervised (Coley & Hoffman, 1996).

The data did not support the hypotheses that family violence exposure would moderate the relations among neighborhood/school violence exposure and parent-rated adaptive skills, adolescent-rated personal adjustment, or adolescent-rated psychological distress. Low levels of family violence exposure in the face of community violence exposure did not appear to function as a protective factor in promoting positive adjustment and adaptive skills. Furthermore, high levels of family violence exposure did not appear to be a potentiating factor for psychological distress, contrary to previous theory (Osofsky et al., 1993). The selection of outcome variables may have influenced these results. Measurement of symptoms of posttraumatic stress may have yielded significant results, as there appears to be stronger association between community violence exposure, family violence exposure, and symptoms of posttraumatic stress. For instance, Overstreet and Braun discovered that 11% of their sample had clinically significant symptoms of depression, whereas other investigations have found rates of PTSD ranging from 20-60% (Mazza & Overstreet, 2000; Overstreet & Braun, 1999). Researchers have suggested that outcome variables, such as depression, may be less sensitive to chronic violence exposure (Fitzpatrick, 1993).

Family, school, and neighborhood violence exposures did not exert a significant main effect upon parent-rated adaptive skills, consisting of social skills and leadership behaviors, or adolescent-rated personal adjustment, involving self-esteem, self-reliance, and interpersonal relationships. However, no previous research had linked violence exposure with decreased positive outcome. Consistent with previous literature, a main effect for family violence exposure was demonstrated from the SAD Triad, consisting of depression, anxiety, and social stress

(DuRant et al., 1995). Again, family violence exposure was demonstrated to have a stronger relation with psychological distress than community violence exposure, indicating the importance of measuring this form of violence in future investigations.

Family Relationship Skills

For analyses involving family relationship skills as a moderator of the relation between community violence exposure and outcome, results again were mixed. One hypothesis involving psychological distress as an outcome variable was supported. Adolescent-rated family relationship skills appeared to moderate the association between school violence exposure and depression, anxiety, and social stress. At more positive levels of adolescent-rated skills, the adverse impact of school violence exposure was negated. When the adolescent rated the family as having more negative communication and problem solving skills, adolescents reported more depression, anxiety, and social stress as school violence exposure increased. Therefore, adolescent-perceived communication/problem solving skills served as a potentiating and compensatory factor in the presence of school violence exposure, consistent with previous literature concerning communication/problem solving skills (e.g., Forehand et al., 1991). Again, targeting family communication/problem solving skills in adolescents who are experiencing psychological distress in light of school violence exposure may be useful. Family relationship skills did not moderate the relation between neighborhood violence exposure and psychological distress, which may be consistent with the previous conjecture that parental functioning may be differentially effected by school and neighborhood violence. Close parent and adolescent relationships may lead to greater modeling of poor coping when parents are personally distressed due to neighborhood violence exposure (Mazza & Overstreet, 2000).

Conversely, parent-rated family relationship skills were not found to moderate this relationship. Examination of the items in the Parent-Adolescent Relationship Questionnaire (PARQ; Robin et al., 1990) revealed that parent-rated skills focused upon the adolescent's behavior, while adolescent-rated skills focused upon the parent's behavior. Therefore, it would appear that the behavior of the parent would more likely moderate the relation between violence exposure and negative outcome than the positive communication of the adolescent. Research investigating the moderating impact of social support in the face of violence exposure and other stressors appear to support this notion (Berman et al., 1996). Furthermore, research has demonstrated that parents and adolescents view their interactions in a different manner (Hartos & Power, 2000; Steinberg, 2001), which also influences this different pattern of results.

Communication and problem solving skills, as measured by the parent or the adolescent, did not moderate the relation between community violence exposure and positive outcome, including parent-rated adaptive skills, adolescent-rated personal adjustment, and adolescent-rated conduct. The parenting practices of families residing in dangerous environments and experiencing multiple stressors, such as poverty, may be negatively impacted by these negative life events. Family communication may be disrupted, thereby limiting the effective social support from parents that adolescents require to cope with violence exposure (Overstreet & Braun, 2001). Family communication/problem solving skills may be enough to reduce the negative impact (i.e., psychological distress) associated with violence exposure, but increased family resources may be needed to promote positive outcome in these environments. For instance, parental distress in the face of community violence exposure may negatively impact parental coping skills, which are, in turn, modeled for the child (Linares et al., 2001; Mazza & Overstreet, 2000). Parental functioning may be impacted less by school violence compared to

neighborhood violence, so different protective factors may be needed for neighborhood and school violence exposure (Grossman et al., 1992).

Parent-rated and adolescent-rated skills were demonstrated to have a main effect upon parent-rated adaptive skills. Therefore, regardless of violence exposure status, having positive communication and problem solving skills within the family has a positive influence upon social skills and leadership behaviors in the adolescent. Parent-rated skills also were demonstrated to have an independent impact upon psychological distress, revealing that less positive communication and problem solving skills in the adolescent are positively related to increased depression, anxiety, and social stress, regardless of risk status. These results are consistent with other findings, in which parent and adolescent communication and family cohesion were independently related to mood, deviance, self-esteem, and grades in female children, regardless of risk status (Grossman et al., 1992).

Strengths of Current Investigation

This study attempted to extend the literature on adolescents exposed to community violence in many ways. Importantly, previous researchers have not carefully delineated the setting of violence exposure, often confounding violence in the home, school, and neighborhood. This study demonstrated that the consideration of family violence independently from community violence exposure is important to understanding the interplay of various levels of a child's ecology upon development, both positive and negative. Furthermore, this study attempted to expand the community violence exposure literature by focusing upon, not only negative outcome, but also positive outcome or resilience in the face of violence exposure. Lastly, this study utilized a multiple informant methodology, which has not been utilized considerably in this literature base. For instance, researchers have indicated that few studies of parent-adolescent

communication skills have actually surveyed both participants concerning their individual perspectives (Hartos & Power, 2000).

Study Limitations

The current study has several limitations. First, the majority of participants were female, limiting generalization to males. Second, all participants were currently attending school, therefore, the results also cannot be applied to adolescents who have ceased attending school. Considerable differences between adolescents who remain in school in the face of violence exposure, particularly in the school setting, may exist. Furthermore, the measure of family violence exposure, the SAVE, is a general measure of violence exposure in the home setting, and not specific to marital violence exposure. Although the SAVE was validated with the Conflict Tactics Scale (CTS; Straus, 1979), the most commonly utilized measure for marital violence exposure (Hastings & Kelley, 1997), a different pattern of results may be found when marital violence alone is considered. Lastly, although multi-informant methodology was used, results were still based upon self-report. Future studies involving observational data of parent and adolescent communication and problem solving skills would be useful.

Directions for Future Research

Future studies should replicate these findings and extend them by further elucidating the role of other family and community stressors, such as parental psychopathology and parental violence exposure. Moreover, the impact of child abuse, particularly in light of the high correlation between family violence and child physical abuse (Tajima, 2000), should be examined. Initial results indicate that community violence exposure continues to influence negative outcome, after controlling for child maltreatment (Lynch & Cicchetti, 1998), and these results should be investigated in adolescent populations with expanded consideration of

moderating and mediating factors. Other aspects of community violence exposure, such as proximity and knowledge of the victim, should be considered, as these factors have been found to play an important role in the etiology of traumatic responses to other violent events (Pynoos et al., 1987). Most importantly, the search for factors that promote resilience or positive outcome after exposure to violent events should continue (Farrell & Bruce, 1997; Osofsky, 1999). Unfortunately, the existence of protective factors alone is necessary, but not sufficient, for the development of resilience (Mazza & Overstreet, 2000), therefore, the search of compensatory factors must continue to promote creation and implementation of successful intervention and prevention programs.

References

- Aiken, L.S., & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Ary, D.V., Duncan, T.E., Biglan, A., Metzler, C.W., Noell, J.W., & Smolkowski, K. (1999). Development of adolescent problem behavior. *Journal of Abnormal Child Psychology*, *27*, 141-150.
- Attar, B.K., Guerra, N.G., & Tolan, P.H. (1994). Neighborhood disadvantage, stressful life events, and adjustment in urban elementary school children. *Journal of Clinical Child Psychology*, *23*, 391-400.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical consideration. *Journal of Personality and Social Psychology*, *51*, 1173-1182.
- Barton, M., & Stabb, S.D. (1996). Exposure to violence and post-traumatic stress disorder in urban adolescents. *Adolescence*, *31*, 489-498.
- Bell, C., & Jenkins, E.J. (1993). Community violence and children on Chicago's southside. *Psychiatry*, *56*, 46-54.
- Berenson, A.B., Wiemann, C.M., McCombs, S. (2001). Exposure to violence and associated health-risk behaviors among adolescent girls. *Archives of Pediatric and Adolescent Medicine*, *155*, 1238-1242.
- Berman, S.L., Kurtines, W.M., Silverman, W.K., & Serafini, L.T. (1996). The impact of exposure to crime and violence on urban youth. *American Journal of Orthopsychiatry*, *66*, 329-336.
- Boney-McCoy, S., & Finkelhor, D. (1995). Is youth victimization related to trauma symptoms and depression after controlling for prior symptoms and family relationships? A longitudinal, prospective study. *Journal of Consulting and Clinical Psychology*, *64*, 1406-1416.
- Bowen, N.K., & Bowen, G.L (1999). Effects of crime and violence in neighborhoods and schools on the school behavior and performance of adolescents. *Journal of Adolescent Research*, *14*, 319-342.
- Children's Defense Fund Report. (1996). *Children in the United States*. Washington DC: Author.
- Christopoulos, C., Cohn, D., Shaw, D.S., Joyce, S., Sullivan-Hanson, J., Kraft, S.P., et al. (1987). Children of abused women: I. Adjustment at time of shelter residence. *Journal of Marriage and Family*, *49*, 611-619.

Cicchetti, D., & Lynch, M. (1993). Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children's development. *Psychiatry, 56*, 96-118.

Coley, R.L., & Hoffman, L.W. (1996). Relations of parental supervision and monitoring to children's functioning in various contexts: Moderating effects of families and neighborhoods. *Journal of Applied Developmental Psychology, 17*, 51-68.

Conger, R.D., Conger, K.J., Elder, G.H., Lorenz, F.O., Simons, R.L., & Whitbeck, L.B. (1992). A family process model of economic hardship and adjustment in early adolescent boys. *Child Development, 63*, 526-542.

Conger, R.D., Conger, K.J., Elder, G.H., Lorenz, F.O., Simons, R.L., & Whitbeck, L.B. (1993). Family economic stress and adjustment of early adolescent girls. *Developmental Psychology, 29*, 206-219.

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

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

Cooley-Quille, M.R., Turner, S.M., & Biedel, D.C. (1995). Emotional impact of children's exposure to community violence: A preliminary study. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*, 1362-1367.

Cummings, E.M. (1998). Children exposed to marital conflict and violence: Conceptual and theoretical directions. In G.W. Holden, R. Geffner, & E.N. Jouriles (Eds.), *Children exposed to marital violence: Theory, research, and applied issues* (pp. 55-94). Washington, DC: American Psychological Association.

Dawud-Noursi, S., Lamb, M.E., & Sternberg, K.J. (1998). The relations among domestic violence, peer relationships, and academic performance. In M. Lewis & C. Feiring (Eds.), *Families, risk, and competence* (pp. 207-226). Mahwah, NJ: Lawrence Erlbaum.

Dembo, R., Wothke, W., Shemwell, M., Pacheco, K., Seeberger, W., Rollie, M., et al. (2000). A structural model of the influence of family problems and child abuse factors on serious delinquency among youths processed at a juvenile assessment center. *Journal of Child and Adolescent Substance Abuse, 10*, 17-31.

D'Imperio, R.L., Dubow, E.F., & Ippolito, M.F. (2000). Resilient and stress-affected adolescents in an urban setting. *Journal of Clinical Child Psychology, 29*, 129-142.

Duncan, D.F. (1996). Growing up under the gun: Children and adolescents coping with violent neighborhoods. *The Journal of Primary Prevention, 16*, 343-356.

DuRant, R.H., Cadenhead, C., Pendergrast, R.A., Slavens, G., & Linder, C.W. (1994). Factors associated with the use of violence among urban black adolescents. *American Journal of Public Health, 84*, 612-617.

DuRant, R.H., Getts, A., Cadenhead, C., Emans, S.J., & Woods, E.R. (1995). Exposure to violence and victimization and depression, hopelessness, and purpose in life among adolescents living in and around public housing. *Development and Behavioral Pediatrics, 16*, 233-237.

D'Zurilla, T., & Goldfried, M.R. (1971). Problem solving and behavior modification. *Journal of Abnormal Psychology, 78*, 107-126.

Eckenrode, J., Laird, M., & Doris, J. (1993). School performance and disciplinary problems among abused and neglected children. *Developmental Psychology, 29*, 53-62.

Elliot, D.S., Hamburg, B., & Williams, K.R. (1998). Violence in american schools: An overview. In D.S. Elliot, B.A. Hamburg, & K.R. Williams, (Eds.), *Violence in American schools* (pp. 3-30). Cambridge: Cambridge University Press.

Famularo, R., Fenton, T., & Kinscheriff, R. (1993). Child maltreatment and the development of posttraumatic stress disorder. *American Psychologist, 48*, 755-760.

Farrell, A.D., & Bruce, S.E. (1997). Impact of community violence exposure on violent behavior and emotional distress among urban adolescents. *Journal of Clinical Child Psychology, 26*, 2-14.

Fick, A.C., & Thomas, S.M. (1995). Growing up in a violence environment: Relationship to health-related beliefs and behaviors. *Youth and Society, 27*, 136-147.

Finkelhor, D., & Dzuiba-Leatherman, J. (1994). Victimization of children. *American Psychologist, 49*, 173-183.

Fitzpatrick, K.M. (1993). Exposure to violence and presence of depression among low-income, african-american youth. *Journal of Consulting and Clinical Psychology, 61*, 528-531.

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

Flaherty, L.T. (2001). School violence and the school environment. In M. Shafii, & S.L. Shafii (Eds.), *School violence: Assessment, management, prevention* (pp. 25-52). Washington DC: American Psychiatric Publishing.

Flannery, D.J., Singer, M.I., & Wester, K. (2001). Violence exposure, psychological trauma, and suicidal risk in a community sample of dangerously violent adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 435-442.

Flannery, D.J., Singer, M., Williams, L., & Castro, P. (1998). Adolescent violence exposure and victimization at home: Coping and psychological trauma symptoms. *International Review of Victimology*, 6, 29-48.

Flowers, A.L., Hastings, T.L., & Kelley, M.L. (2000). Development of a screening instrument for exposure to violence in children: The KID-SAVE. *Journal of Psychopathology and Behavioral Assessment*, 22, 91-104.

Forehand, R., Wierson, M., McCombs Thomas, A., Armistead, L., Kempton, T., & Neighbors, B. (1991). The role of family stressors and parent relationships on adolescent functioning. *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 316-322.

Foster, S.L., & Robin, A.L. (1998). Parent-adolescent conflict and relationship discord. In E.J. Mash, & R.A. Barkley (Eds.), *Treatment of childhood disorders* (2nd ed., pp. 601-646). New York: Guilford Press.

Garbarino, J. (1989). Troubled youths, troubled families: The dynamics of adolescent maltreatment. In D. Cicchetti & C. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect* (pp. 685-706). New York: Cambridge University Press.

Gladstein, J., Slater Rusonis, E.J., & Heald, F.P. (1992). A comparison of inner-city and upper-middle class youths' exposure to violence. *Journal of Adolescent Health*, 13, 275-280.

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

Grossman, F.K., Beinashowitz, J., Anderson, L., Sajkurai, M., Finnin, L., & Flaherty, M. (1992). Risk and resilience in young adolescents. *Journal of Youth and Adolescence*, 21, 529-550.

Guterman, N.B., Cameron, M., & Staller, K. (2000). Definitional and measurement issues in the study of community violence among children and youths. *Journal of Community Psychology*, 28, 571-587.

Harold, G.T., & Conger, R.D. (1997). Marital conflict and adolescent distress: The role of adolescent awareness. *Child Development*, 68, 333-350.

Hartos, J.L., & Power, T.G. (2000). Association between mother and adolescent reports for assessing relations between parent-adolescent communication and adolescent adjustment. *Journal of Youth and Adolescence*, 29, 441-449.

Haskett, M.E., & Kistener, J.A. (1991). Social interaction and peer perceptions of young physically abused children. *Child Development, 62*, 979-990.

Hastings, T., & Kelley, M.L. (1997). Development and validation of the Screen for Adolescent Violence Exposure (SAVE). *Journal of Abnormal Child Psychology, 25*, 511-520.

Hill, H.M., & Madhere, S. (1996). Exposure to community violence and african american children: A multidimensional model of risks and resources. *Journal of Community Psychology, 24*, 26-43.

Holden, G.W. (1998). Introduction: The development of research into another consequence of family violence. In G.W. Holden, R. Geffner, & E.N. Jouriles (Eds.), *Children exposed to marital violence: Theory, research, and applied issues* (pp. 1-20). Washington, DC: American Psychological Association.

Holmbeck, G.N. (2002). Post-hoc probing of significant moderational and mediational effects in studies of pediatric populations. *Journal of Pediatric Psychology, 27*, 87-96.

Hops, H., Tildesley, E., Lichtenstein, E., Ary, D., & Sherman, L. (1990). Parent-adolescent problem-solving interactions and drug use. *American Journal of Drug and Alcohol Abuse, 16*, 239-259.

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

Hughes, H.M. (1988). Psychological and behavioral correlates of family violence in child witnesses and victims. *American Journal of Orthopsychiatry, 58*, 77-90.

Hughes, H.M., & Barad, S.J. (1983). Psychological functioning of children in a battered women's shelter: A preliminary investigation. *American Journal of Orthopsychiatry, 53*, 525-531.

Hughes, H.M., & Luke, D.A. (1998). Heterogeneity in adjustment among children of battered women. In G.W. Holden, R. Geffner, & E.N. Jouriles (Eds.), *Children exposed to marital violence: Theory, research, and applied issues* (pp. 185-222). Washington, DC: American Psychological Association.

Hurt, H., Malmud, El, Brodsky, N.L., & Giannetta, J. (2001). Exposure to violence: Psychological and academic correlates in child witnesses. *Archives of Pediatric and Adolescent Medicine, 155*, 1351-1356.

Jaffe, P., Wolfe, D., Wilson, S., & Zak, L.M. (1986). Similarities in behavioral and social maladjustment among child victims and witnesses to family violence. *American Journal of Orthopsychiatry, 56*, 142-146.

Jones, F.C., Ajiroto, C., & Johnson, J. (1996). African american children and adolescents exposure to community violence: A pilot study. *Journal of Cultural Diversity*, 3, 48-52.

Jouriles, E.N., Barling, J., & O'Leary, K.D. (1987). Predicting child behavior problems in maritally violent families. *Journal of Abnormal Child Psychology*, 15, 165-173.

Kaplan, S.J., Pelcovitz, D., & Labruna, V. (1999). Child and adolescent abuse and neglect research: A review of the past 10 years. Part I: Physical and emotional abuse and neglect. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1214-1222.

Kaplan, S.J., Pelcovitz, D., Salzinger, S., Mandel, F., Weiner, M., & Labruna, V. (1999). Adolescent physical abuse and risk for suicidal behaviors. *Journal of Interpersonal Violence*, 14, 976-988.

Kaplan, S.J., Pelcovitz, D., Salzinger, S., Weiner, M., Mandel, F.S., Lesser, A., et al. (1998). Adolescent physical abuse: Risk for adolescent psychiatric disorders. *American Journal of Psychiatry*, 155, 954-959.

Kilpatrick, K.L., & Williams, L.M. (1997). Post-traumatic stress disorder in child witnesses to domestic violence. *American Journal of Orthopsychiatry*, 67, 639-644.

Kolbo, J.R. (1996). Risk and resilience among children exposed to family violence. *Violence and Victims*, 11, 113-128.

Kuther, T.L. (1999). A developmental-contextual perspective on youth covictimization by community violence. *Adolescence*, 34, 699-714.

Laub, J.H., & Lauritsen, J.L. (1998). The interdependence of school violence with neighborhood and family conditions. In D.S. Elliot, B.A. Hamburg, & K.R. Williams, (Eds.), *Violence in American schools* (pp. 127-158). Cambridge: Cambridge University Press.

Li, X., Howard, D., Stanton, B., Rachuba, L., & Cross, S. (1998). Distress symptoms among urban african american children and adolescents. *Archives of Pediatric and Adolescent Medicine*, 152, 569-577.

Linares, L.O., Heeren, T., Bronfman, E., Zuckerman, B, Augustyn, M., & Tronick, E. (2001). A mediational model for the impact of exposure to community violence on early child behavior problems. *Child Development*, 72, 639-652.

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

Mann, B.J., Borduin, C.M., Henggeler, S.W., & Blaske, D.M. (1990). An investigation of systemic conceptualizations of parent-child coalitions and symptom change. *Journal of Consulting and Clinical Psychology, 58*, 336-344.

Margolin, G., & Gordis, E.B. (2000). The effects of family and community violence on children. *Annual Review of Psychology, Annual 2000*, 445-477.

Martinez, P., & Richters, J.E. (1993). The NIMH community violence project: II. Children's distress symptoms associated with violence exposure. *Psychiatry, 56*, 22-35.

Masten, A.S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227-238.

Mazza, J.J., & Overstreet, S. (2000). Children and adolescents exposed to community violence: A mental health perspective for school psychologists. *School Psychology Review, 29*, 86-101.

Miller, L.S., Wasserman, G.A., Neugebauer, R., Gorman-Smith, D., & Kamboukos, D. (1999). Witnessed community violence and antisocial behavior in high-risk, urban boys. *Journal of Clinical Child Psychology, 28*, 2-11.

National Center for Education Statistics. (2001). *Indicators of school crime and safety, 2001* (NCES Publication No. 2002113). Washington DC: Author. (<http://nces.ed.gov/pubs2002/crime2001>).

Nettles, S.M., Mucherah, W., & Jones, D.S. (2000). Understanding resilience: The role of social resources. *Journal of Education for Students Placed at Risk, 5*, 47-60.

O'Keefe, M. (1996). The differential effects of family violence on adolescent adjustment. *Child and Adolescent Social Work Journal, 13*, 51-68.

O'Keefe, M. (1997). Adolescents' exposure to community and school violence: Prevalence and behavioral correlates. *Journal of Adolescent Health, 20*, 368-376.

Osofsky, J. (1995). The effects of exposure to violence on young children. *American Psychologist, 50*, 782-788.

Osofsky, J. (1999). The impact of violence on children. *Domestic Violence and Children, 9*, 33-49.

Osofsky, J.D., & Scheeringa, M.S. (1997). Community and domestic violence exposure: Effects on development and psychopathology. In D. Cicchetti & S.L. Toth (Eds.), *Developmental perspectives on trauma: Theory, research, and intervention* (pp. 155-180). Rochester, NY: University of Rochester Press.

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

Overstreet, S. (2000). Exposure to community violence: Defining the problem and understanding the consequences. *Journal of Child and Family Studies*, *9*, 7-25.

Overstreet, S., & Braun, S. (1999). A preliminary examination of the relationship between exposure to community violence and academic functioning. *School Psychology Quarterly*, *14*, 380-396.

Overstreet, S., & Braun, S. (2001). Exposure to community violence and post-traumatic stress symptoms: Mediating factors. *American Journal of Orthopsychiatry*, *70*, 263-271.

Overstreet, S., Dempsey, M., Graham, D., & Moely, B. (1999). Availability of family support as a moderator of exposure to community violence. *Journal of Clinical Child Psychology*, *28*, 151-159.

Paikoff, R.L., & Brooks-Dunn, J. (1991). Do parent-child relationships change during puberty? *Psychological Bulletin*, *110*, 47-66.

Parker, J.G., & Herrera, C. (1996). Interpersonal processes in friendship: A comparison of abused and nonabused children's experiences. *Developmental Psychology*, *32*, 1025-1038.

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

Reed, J.S., & Dubow, E.F. (1997). Cognitive and behavioral predictors of communication in clinic-referred and nonclinical mother-adolescent dyads. *Journal of Marriage and the Family*, *59*, 91-102.

Reynolds, C.R., & Kamphaus, R.W. (1998). *BASC: Behavior assessment system for children manual*. Circle Pines, MN: American Guidance Service.

Richters, J.E., & Martinez, P.E. (1993a). The NIMH community violence project: I. Children as victims of and witnesses of violence. *Psychiatry*, *56*, 7-21.

Richters, J.E., & Martinez, P.E. (1993b). Violent communities, family choices, and children's chances: An algorithm for improving the odds. *Development and Psychopathology*, *5*, 609-627.

Riggs, S., Alario, A.J., & McHorney, C. (1990). Health risk behaviors and attempted suicide in adolescents who report prior maltreatment. *Journal of Pediatrics*, *116*, 815-821.

Riley, A.W., Forrest, C.B., Starfield, B., Green, B., Kang, M., & Ensminger, M. (1998). Reliability and validity of the adolescent health profile-types. *Medical Care*, *36*, 1237-1248.

Riley, A.W., Green, B.F., Forrest, C.B., Starfield, B., Kang, M., & Ensminger, M.E. (1998). A taxonomy of adolescent health. *Medical Care*, 36, 1228-1236.

Robin, A.L., & Foster, S.L. (1989). *Negotiating parent-adolescent conflict: A behavioral-family systems approach*. New York: Guilford Press.

Robin, A.L., & Weiss, J.G. (1980). Criterion-related validity of behavioral and self-report measures of problem-solving communication skills in distress and non-distressed parent-adolescent dyads. *Behavioral Assessment*, 2, 339-352.

Robin, A.L., Koepke, T., & Moye, A. (1990). Multidimensional assessment of parent-adolescent relations. *Psychological Assessment*, 2, 451-459.

Salzinger, S. (1999). Determinants of abuse and the effects of violence on children and adolescents. In A.J. Gorecnny & M. Hersen (Eds.), *Handbook of pediatric and adolescent health psychology* (pp. 429-449). Needham Heights, MA: Allyn & Bacon.

Salzinger, S., Feldman, R.S., Hammer, M., & Rosario, M. (1993). The effects of physical abuse on children's social relationships. *Child Development*, 64, 169-187.

Schwab-Stone, M., Ayers, T.S., Kaspro, W., Voyce, C., Barone, C., Shriver, T., et al. (1995). No safe haven: A study of violence exposure in an urban community. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 1343-1352.

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

Shahinfar, A., Kupersmidt, J.B., & Matza, L.S. (2001). The relation between exposure to violence and social information processing among incarcerated adolescents. *Journal of Abnormal Psychology*, 110, 136-141.

Silva, R.R., Alpert, M., Munoz, D.M., Singh, S., Matzner, F., & Dummit, S. (2000). Stress and vulnerability to posttraumatic stress disorder in children and adolescents. *American Journal of Psychiatry*, 157, 1229-1235.

Silvern, L., Karyl, J., Waelde, L., Hodges, W.F., Starek, J., Heidt, E., et al. (1995). Retrospective reports of parental partner abuse: Relationships to depression, trauma symptoms, and self-esteem among college students. *Journal of Family Violence*, 9, 79-98.

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

Singer, M.I., Miller, D.B., Guo, S., Flannery, F.J., Frierson, T., & Slovak, K. (1999). Contributions to violent behavior among elementary and middle school children. *Pediatrics*, *104*, 878-884.

Song, L., Singer, M.I., & Anglin, T.M. (1998). Violence exposure and emotional trauma as contributors to adolescents' violent behaviors. *Archives of Pediatric and Adolescent Medicine*, *152*, 531-536.

Springer, C., & Padgett, D.K. (2000). Gender differences in young adolescents' exposure to violence and rates of PTSD symptomatology. *American Journal of Orthopsychiatry*, *70*, 370-379.

Starfield, B., Bergner, M., Ensminger, M., Riley, A., Ryan, S., Green, B., et al. (1993). Adolescent health status measurement: Development of the child health and illness profile. *Pediatrics*, *91*, 430-435.

Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence*, *11*, 1-19.

Sternberg, K.J., Lamb, M.E., & Dawud-Noursi, S. (1998). Using multiple informants to understand domestic violence and its effects. In G.W. Holden, R. Geffner, & E.N. Jouriles (Eds.), *Children exposed to marital violence: Theory, research, and applied issues* (pp. 121-156). Washington, DC: American Psychological Association.

Sternberg, K.J., Lamb, M.E., Greenbaum, C., Cicchetti, D., Dawud, S., Cortes, R.M., et al. (1993). Effects of domestic violence on children's behavior problems and depression. *Developmental Psychology*, *29*, 44-52.

Straus, M.A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family*, *41*, 75-88.

Tabachnick, B.G., & Fidell, L.S. (2001). *Using multivariate statistics*. Boston: Allyn and Bacon.

Tajima, E.A. (2000). The relative importance of wife abuse as a risk factor for violence against children. *Child Abuse and Neglect*, *11*, 1383-1398.

Toth, S.L., Manly, J.T., & Cicchetti, D., (1992). Child maltreatment and vulnerability to depression. *Development and Psychopathology*, *4*, 97-112.

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

Whittaker, S., & Bry, B.H. (1991). Overt and covert parental conflict and adolescent problems: Observed marital interaction in clinic and nonclinic families. *Adolescence*, 26, 865-877.

Wolfe, D.A., Jaffe, P., Wilson, S.K., & Zak, L. (1985). Children of battered women: The relation of child behavior to family violence and maternal stress. *Journal of Consulting and Clinical Psychology*, 53, 657-665.

Wolfe, D.A., Wekerle, C., Reitzel-Jaffe, D., & Lefebvre, L. (1998). Factors associated with abusive relationships among maltreated and nonmaltreated youth. *Development and Psychopathology*, 10, 61-85.

Wolfe, D.A., Zak, L., Wilson, S., & Jaffe, P. (1986). Child witnesses to violence between parents: Critical issues in behavioral and social adjustment. *Journal of Abnormal Child Psychology*, 14, 95-104.

Zimmerman, M.A., Ramirez-Valles, J., & Maton, K.J. (1999). Resilience among urban african american male adolescents: A study of the protective effects of sociopolitical control on their mental health. *American Journal of Community Psychology*, 27, 733-751.

Appendix A
Screen for Adolescent Violence Exposure (SAVE)

Age: _____ Grade: _____ Sex: _____ Male _____ Female

Race: _____ African American
 _____ White
 _____ Hispanic
 _____ Asian
 _____ Other

Who do you live with?
 _____ Mom and Dad _____ Dad and Stepmom
 _____ Mom only _____ Grandparent
 _____ Dad only _____ Another relative
 _____ Mom and Stepdad _____ Someone other than family

Female Guardian's Education

(check highest completed)

_____ Middle School
 _____ Some High School
 _____ High School degree
 _____ Some College
 _____ College degree
 _____ Graduate degree

Male Guardian's Education

(check highest completed)

_____ Middle School
 _____ Some High School
 _____ High School degree
 _____ Some College
 _____ College degree
 _____ Graduate degree

Female Guardian's Source of Income: _____

Male Guardian's Source of Income: _____

We are interested in hearing about your experiences of the bad things that you have seen, heard of, or that have happened to you. Please read and answer the following statements about violent things that have happened at home, at school, or in your neighborhood involving you. For each statement please check the line that best describes **how often** these things have happened. For example, if you "have seen someone carry a gun...at school" sometimes, you would check the line that says **sometimes**.

		<u>How often it happens</u>				
		<i>Never</i>	<i>Hardly Ever</i>	<i>Sometimes</i>	<i>Almost Always</i>	<i>Always</i>
1.	I have seen someone carry a gun...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
2.	Someone has pulled a gun on me...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
3.	Grownups beat me up...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
4.	Someone my age has threatened to beat me up...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—

		<u>How often it happens</u>				
		<i>Never</i>	<i>Hardly Ever</i>	<i>Sometimes</i>	<i>Almost Always</i>	<i>Always</i>
5.	I have been shot...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
6.	I have seen the police arrest someone...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
7.	Someone my age hits me...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
8.	I have seen someone get killed...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
9.	I have seen a grownup hit a kid...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
10.	I have heard about someone getting shot...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
11.	Someone has pulled a knife on me...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
12.	Grownups threaten to beat me up...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
13.	I have had shots fired at me...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—
14.	I have seen someone carry a knife...					
	-at my school	—	—	—	—	—
	-in my home	—	—	—	—	—
	-in my neighborhood	—	—	—	—	—

How often it happens

Never *Hardly Ever* *Sometimes* *Almost Always* *Always*

15. I have seen someone get shot...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
16. I have been attacked with a knife...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
17. I have seen a kid hit a grownup...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
18. I have seen people scream at each other...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
19. I have seen someone pull a gun on someone else...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
20. I have seen someone get beaten up...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
21. I have heard about someone getting killed...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
22. I have heard about someone getting attacked with a knife...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
23. I have heard about someone getting beaten up...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
24. I have seen someone pull a knife on someone else...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—

How often it happens

Never *Hardly Ever* *Sometimes* *Almost Always* *Always*

25. I have been badly hurt...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
26. I have seen someone get attacked with a knife...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
27. I hear gunshots...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
28. I have seen someone get badly hurt...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
29. I have run for cover when people started shooting...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
30. Grownups scream at me...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
31. I have heard of someone carrying a gun...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—
32. Grownups hit me...					
-at my school	—	—	—	—	—
-in my home	—	—	—	—	—
-in my neighborhood	—	—	—	—	—

Appendix B

Information Sheet

CHILD INFORMATION: Child Age: _____ Child Gender: Male _____ Female _____

Child Grade: _____

PARENT INFORMATION:

Age: _____

Marital Status:

- _____ 1. Married
- _____ 2. Divorced
- _____ 3. Separated
- _____ 4. Never Married
- _____ 5. Living together
- _____ 6. Widow

Your Relationship to Child:

- _____ 1. Mom
- _____ 2. Dad
- _____ 3. Stepmother
- _____ 4. Stepfather
- _____ 5. Grandparent
- _____ 6. Aunt/uncle
- _____ 7. Other relative
- _____ 8. Someone other than family

Total Family Income:

- _____ 1. Under \$10,000
- _____ 2. 11 – 20,000
- _____ 3. 21 – 30,000
- _____ 4. 31 – 40,000
- _____ 5. 41 – 50,000
- _____ 6. Above 50,000

Race:

- _____ 1. African American
- _____ 2. White
- _____ 3. Hispanic
- _____ 4. Asian
- _____ 5. Other

Your Education:

- _____ 1. Elementary
- _____ 2. Junior high school
- _____ 3. Some high school
- _____ 4. GED
- _____ 5. High school diploma
- _____ 6. Some college
- _____ 7. College degree
- _____ 8. Post college

Spouse's Education:

- _____ 1. Elementary
- _____ 2. Junior high school
- _____ 3. Some high school
- _____ 4. GED
- _____ 5. High school diploma
- _____ 6. Some college
- _____ 7. College degree
- _____ 8. Post college

Your Occupation: _____

Spouse's Occupation: _____

How many adults **over 18 years old** live in your home? _____

How many children **under 18 years old** live in your home? _____

Vita

Monique M. LeBlanc was born and raised in New Orleans, Louisiana. She attended the University of Southern Mississippi where she received her Bachelor of Arts degree in psychology in May 1996. In August 1996, she began her doctoral training in clinical psychology under the supervision of Mary Lou Kelley, Ph.D., at Louisiana State University. In 1998, Monique received her Master of Arts degree in psychology from Louisiana State University. She attended the Medical University of South Carolina from July 2001 to July 2002, where she completed her pre-doctoral internship at the National Crime Victims Research and Treatment Center, under the direction of Rochelle F. Hanson, Ph.D. She will receive the degree of Doctor of Philosophy in clinical psychology in August 2002. Her primary research interests are the treatment and prevention of violence exposure and child abuse and neglect.