

THE IMPACT OF EXPOSURE TO SCHOOL VIOLENCE  
AND THE ROLE OF HOPE IN LOW-INCOME,  
URBAN YOUTH

by

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## ABSTRACT OF THESIS

The Impact of Exposure to School Violence and the Role of Hope in Low-income,

Urban Youth

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The purpose of the current study was to investigate the prevalence and impact of personal victimization and witnessing violence in the school setting in a sample of low-income, ethnic-minority children. In addition, hope was examined as a potential protective factor in buffering youth from the development of problem behaviors in the context of school-specific violence. It was hypothesized that exposure to school violence would be positively associated with externalizing symptoms. Additionally, it was hypothesized that hope would be positively related to indices of adjustment, and inversely related to problem behaviors. Finally, exploratory questions suggested by extant research were posed further investigating associations between exposure to school violence and adjustment. Additionally, the moderating effects of hope and gender on the linkages between exposure to school violence and psychological and behavioral functioning were examined. Data were derived from a longitudinal primary prevention research project evaluating the impact of a social and emotional learning curriculum. Participants were approximately 161 African-American and Latino fifth graders. Students completed self-reports of self-concept and hope. Teachers completed a teacher-rated survey assessing

levels of problem behaviors, social skills, and academic competence for each student in their class. Results indicated that the majority of youth had been personally victimized and witnessed violence on one or more occasion during a three-month period. In addition, exposure to school violence was positively associated with problem behaviors, and negatively associated with social skills, self-concept, and academic competence, most notably for males. Moreover, hope provided a buffering effect on females' self-concept for those witnessing higher levels of school violence. Implications of both the prevalence and impact of exposure to school violence, as well as the limited moderating effects of hope found in the current study are discussed in relation to intervention efforts and strengthening future research sampling low-income, ethnic-minority youth.

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## INTRODUCTION

Exposure to violence is a pervasive public health problem that threatens the developmental trajectory of American youth. Low-income, minority children and adolescents are particularly vulnerable to witnessing or being directly victimized by violence (Buka, Stichick, Birdthistle, & Earls, 2001), with upwards of 80% of these children and adolescents reporting exposure to some type of assault in their lifetime (Gorman-Smith, Henry, & Tolan, 2004). Violence experienced in various ecological contexts not only places children at risk for physical harm, but increases risk for hopelessness, aggression, symptoms of distress and delinquency (Bolland, Lian, & Formicella, 2005; Durant, Cadenhead, Pendergrast, Slavens, & Linder, 1994; Farrell & Sullivan, 2004; Patchin, Huebner, McCluskey, Varano, & Bynum, 2006). Violence endemic to schools is especially disturbing considering that youth spend the majority of their time in the academic domain.

Despite the high prevalence of violence to which many youth are exposed, the majority of children and adolescents do not develop problem behaviors, and are resilient in the face of significant adversity. A growing body of research has identified a number of individual, family, and community factors that protect youth from the development of psychopathology (Gorman-Smith et al., 2004; Hammack, Richards, Luo, Edlynn, & Roy, 2004; Brookmeyer, Henrich, Schwab-Stone, 2005). One such factor that is becoming more prominent in the literature is hope.

Aside from reducing overall frequencies of violence, instilling hope in youth may be a key prevention and intervention tactic in mitigating its impact, as preliminary conceptual and empirical linkages have been made between exposure to violence,



poverty, perceptions of failure, hopelessness and subsequent problem behaviors (Bolland, 2003; Bolland et al., 2005). Chronic violence compounded by additional environmental difficulties related to poverty, including dilapidated schools, joblessness, limited access to public and private services, and police harassment may engender feelings of hopelessness and despair in community members.

In the context of such a setting, youth may be especially vulnerable to feeling powerless to effect change in their surroundings, and may succumb to hopelessness regarding the possibility of a present or future characterized by opportunities and choices available to mainstream America. Even more disconcerting, youth who endorse more hopelessness, victimization, and depression tend to believe that they will never reach their 25<sup>th</sup> birthday (Durant et al., 1994). These same youth also self-report higher levels of aggression and violence use.

It should come as no surprise that children and adolescents who have no expectations of a meaningful future, the fundamental basis of hope, and who develop in environments in which opportunities are few, may be more likely to make short-term investments in immediately gratifying, risky behaviors such as aggression (Bolland, 2003). Thus, hope, in part, may be a crucial index of our children's stake in the outcomes yielded by the choices they make, and the impact those choices have on their own futures, as well as the futures of the communities in which they develop. Cultivating a sense of hope in these youth may be a crucial part of getting children to reinvest in their lives. Further, hope may serve to inoculate youth from the negative trajectory exposure to high levels of violence threaten.

In the present study, the construct of hope is defined as a cognitive-motivational set for reaching goals, involving one's belief that one can both develop viable routes to achieving goals, as well as initiate and sustain those routes to achieving goals (Snyder, 1994). Although inverse correlations between hope and psychopathology, and positive correlations between hope and positive adaptation have been fairly well substantiated in the literature utilizing adult samples, less is known regarding such relationships among children. Several studies have also identified hope as a protective factor in difficult life circumstances, yet there is a gap in the literature as to whether hope can moderate the link between exposure to violence and problem behaviors, specifically. The purpose of the current study is to investigate the psychological and behavioral impact of school-based violence in a low-income, minority sample of elementary-age children. In particular, the protective properties of hope will be examined, along with potential positive and negative correlates to which the construct might be related.

#### An Overview of National Violence Trends

Between the period of 1992 and 2001, school violence steadily declined, reflecting trends in the national crime rate (U.S. Department of Education, 2004). Decreases in the lethality of youth violence and frequency of arrests as a result thereof are largely attributable to reductions in firearm use, with fewer youth carrying weapons and taking them to school (United States Department of Health and Human Services [USDHHS], 2001). Homicides and severe violent incidents were down, with fewer of such acts transpiring in the school setting (Bureau of Justice Statistics, 2004). Among public and private school students nationwide, the percentage of students reporting victimization experiences through serious violence (sexual assault, rape, aggravated

assault, and robbery), violent crime, or theft decreased from 10 to 5 percent. The percentage of high school student reports endorsing involvement in physical fights declined from 16 to 13 percent (U.S. Department of Education, 2004). However, rates in total victimization experiences at or away from school have leveled off in recent years (United States Department of Education, 2005).

#### The Prevalence of Community Violence: Research findings

Although national violence rates indicate that youth are significantly safer than they were a decade and a half ago, a significant percentage of youth are still at-risk. Further, research examining the prevalence of youth violence suggests that the rates of violence to which children and adolescents are exposed are higher than national reports imply, especially for certain sub-groups. Such discrepancies occur for a number of reasons. First, national reports on youth violence sample youth who are widely diverse with regard to socioeconomic status, the neighborhoods in which they live, the schools they attend, and race/ethnicity. Conversely, the field has predominately investigated violence exposure using urban youth samples who are at higher risk for being victims and witnesses of violent incidents (Buka et al., 2001). Second, community violence research examines not only severe forms of violence such as being threatened with a knife or gun, getting wounded, raped, witnessing arrests, and murder, but lower level violence such as verbal threats, being chased, or hit. Finally, in contrast to national youth reports, many researchers focus on direct (i.e., personal attack) *and* indirect/vicarious victimization (i.e., witnessing violence).

Using a broader definition for those incidents which constitute violence and focusing on disadvantaged youth, researchers have continued to document alarming rates

of violence inside and outside of school walls (Gorman-Smith, Henry & Tolan, 2004; Miller, Wasserman, Neugebauer, Gorman-Smith, & Kamboukos, 1999; Sullivan, King, & Farrell, 2004). Although the literature typically focuses on inner-city communities, recent research sampling ethnically diverse, low-income, rural youth documented a significant prevalence of violence (Farrell & Sullivan, 2004). Research suggests that violence continues to pose a significant health problem for American children and adolescents, and urban and rural youth are particularly at-risk.

### The Impact of Community Violence

Research examining exposure to violence in multiple settings (i.e., school, neighborhood and home) has denoted that exposure to violence not only places urban and rural youth at risk for physical harm, it serves as a significant risk factor increasing the likelihood that exposed youth will perpetrate aggressive and violent behaviors, and engage in other risky activities (Attar, Guerra & Tolan, 1994; Barkin, Kreiter & Durant, 2001; DiNapoli, 2003; 1994; Farrell & Sullivan, 2004). For example, McCabe, Lucchini, Hough, Yeh, & Hazden (2005) found a relationship between exposure to community violence and externalizing behaviors in a longitudinal study of 423 urban youth between the ages of 12 to 17, even after controlling for confounding variables such as gender, ethnicity, and exposure to other forms of violence.

Other research investigating the impact of exposure to violence has demonstrated that higher prevalence rates put youth at risk for developing negative outcomes in both the behavioral and psychological realms. In an investigation sampling 2,248, 6<sup>th</sup>, 8<sup>th</sup> and 10<sup>th</sup> grade urban students, exposure to violence was associated with poorer outcomes on measures of functional and psychological adaptation (Schwab-Stone et al., 1995). In

another study sampling 731 6-8<sup>th</sup> grade students from urban and rural settings, higher levels of witnessing violence were associated with higher rates of drug use, aggression, delinquency, beliefs supporting aggression, and the undervaluing of academic achievement (Farrell & Sullivan, 2004). Bolland and colleagues (2005) found that witnessing violence, trauma induced stress, and anxiety predicted hopelessness in a longitudinal study using 5,895 inner-city adolescents. Serious victimization experiences did not predict hopelessness, suggesting that youth may be better at coping with personal assaults than with witnessing assaults.

Although exposure to violence has also been linked with psychological distress symptoms including PTSD, anxiety, and depression (e.g., Kliewer, 2004), some research has failed to show decisive relationships between violence exposure and internalizing behaviors when direct and indirect violence were considered separately (e.g., Moses, 1999). Fitzpatrick (1993) explored victimization and depressive symptoms in a sample of 221 7 to 18 year old, low-income youth. Direct experiences of violence were related to distress, and indirect exposure to violence had a negative relationship with depression. Lynch and Cicchetti (1998) found an association between both direct and indirect exposure to violence and depressive symptomatology, with more of the variance accounted for in youth personally victimized in a sample of 322, 7 to 12 year old youth. In sum, there is ample evidence to affirm that exposure to community violence constitutes a significant risk to children's health. Although the research exploring links between violence exposure and internalizing behaviors is mixed, some findings suggest that merging, rather than considering victimization and witnessing separately may contribute to some of the inconclusiveness of results.

### The Prevalence of School Violence

Although a decrease in violence among 12-18 year olds, in or outside of the school setting since 1992 is apparent, that decline leveled off between 2001-2003 (U.S. Department of Education, 2005). Despite the relative safety of school compared with neighborhoods and homes where adult supervision may be lacking, it is clear that school violence remains a significant issue. Further, certain types of violence are even more likely to occur at school than outside of school (U.S. Department of Education, 2005). For example, in a 2003 report of 12-18 year old students, simple assaults and theft were much more likely to occur at school than away from school, whereas serious victimization experiences were more likely to occur outside of school. Specifically, 1.9 million violent incidents (i.e., simple assaults and theft) on school property were reported, with total victimization rates of 73 per 1000 students, and younger adolescents experiencing more victimization at school. Additionally, 1.6 million serious violent incidents occurred outside of school (i.e., aggravated assault, sexual assault), with a victimization rate of 60 total victimization experiences per 1000 students.

The report also indicated lower-level violence persists, with 7 percent of high school students having been bullied several months prior to the survey, and approximately 9 percent had been verbally threatened or injured via a weapon. Additionally, youth reported fears of being attacked at school or to or from school (6%), with African American and Latino youth reporting safety concerns at higher rates than their White counterpart (U.S. Department of Education, 2005).

Taken collectively, schools seem to provide protection from more serious incidents of violence, but do not buffer youth from a high frequency of simple assaults

and theft. Further, it is clear that lower-level violence such as verbal threats at school still persists. The data presented in the previous paragraphs should dispel the notion that schools provide a safe haven for American children. The significant proportion of minority youth that reported school related safety fears should further undermine such a conception. Between the higher levels of safety concerns reported by ethnic-minority youth, and the higher levels of violence to which such youth are exposed, focusing on the particular experiences of low-income, ethnic-minority youth is imperative.

Although less attention has been paid to the impact of witnessing violence in the school setting, some evidence indicates a higher prevalence of witnessing violence than for direct victimization experiences (Singer, 1999). For example, Flannery, Wester, & Singer (2004) examined the prevalence of exposure to violence in a sample of 5,969 7-19 year-old students and its relationship with mental health and behavioral outcomes. Findings indicated that approximately half (44%) of the sample was personally victimized compared with 56-87% of students who experienced vicarious victimization (i.e., witnessing violence). As some research suggests that students may be more at-risk for witnessing high levels of violence in their schools, it is apparent that the consequences of witnessing violence must be considered along with direct victimization.

### The Impact of School Violence

Studies that have specifically examined school-based violence have demonstrated the deleterious impact of both direct and indirect exposure to violence on the healthy development of youth. Manifestations of school violence include verbal and physical aggression, such as bullying. In a large sample of low to lower-middle class children and adolescents, both victimization and witnessing violence were positively associated with

psychological distress and low-violent behavior, even after demographic factors were controlled (Flannery et al., 2004). However, witnessing high levels of violence accounted for most of the variance in the negative psychosocial outcomes. Glew, Fan, Katon, Rivara, & Kernic (2006) found that 22% of their sample of 3,530 elementary-age students were bullied, victims of bullying, or both bullies and victims of bullying. Results indicated that bullies and victims reported more sadness, safety concerns, and feelings that they did not belong compared with bystanders. Victims and “bully-victims” (p. 1026) were at higher risk for academic issues compared with youth witnessing violence. In another study corroborating the concurrence of externalizing behaviors and additional adjustment issues, middle school students who had higher aggression scores endorsed more psychosomatic symptoms, cigarette and alcohol use, and less concern for healthy diet (Piko, Keresztes, & Pluhar, 2005). Taken collectively, school-based studies parallel much of the community violence research in which varying degrees of proximity to aggression/violence place youth at risk youth for developing multiple problems including depression, anxiety, health issues, aggression, and academic failure.

### Gender Differences

#### *Prevalence*

Several studies found significant differences in prevalence rates by gender, with boys more likely to be personally victimized and witness violence than girls in ethnic-minority, low-income samples (Ng-Mak et al., 2004; Schwab-Stone et al., 1995). Yet, other studies suggest that rates of exposure to violence for boys and girls are similar (e.g., Farrell & Sullivan, 2004). Some research suggests that age might be a moderator of gender differences in violence exposure, although patterns are inconsistent. For example, Attar and associates (1994) found that elementary-age girls reported higher frequencies



of violence exposure compared with boys, but gender differences were not found two years later. In a study sampling a large number of 7-15 year olds, Bell and Jenkins (1993) found similar prevalence rates of boys and girls, with an absence of a linear relationship between exposure to violence and age.

### *The impact of exposure to violence*

Several empirical investigations found gender differences in associations between exposure to violence and mental and behavioral outcomes (Buckner et al., 2004; Fitzpatrick, 1993; Moses, 1999). Ng-Mak and colleagues (2004) observed that exposure to community violence was significantly related to higher levels of aggression in boys compared with girls. However, girls were significantly more psychologically distressed. In contrast, other research shows similar levels of externalizing and internalizing symptoms for boys and girls in relation to exposure to community violence (Lynch & Cicchetti, 1998).

### Resilience

Although empirical investigations have yielded low to moderate associations indexing the relationship between exposure to violence and negative psychosocial outcomes, most children and adolescents do not develop problem behaviors despite significant environmental stressors. Nevertheless, historically, the field has predominately concerned itself with the identification of risk-factors and assessment of psychopathology in at-risk groups. More recently, prevention research has shifted away from a deficit model to a resiliency model in youth research. This relatively new paradigm involves the examination of protective and risk factors as developmental antecedents at the individual, family and community levels, and their impact on the

trajectory of our youth (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Gorman-Smith, Henry & Tolan, 2004; Guerra, 2003; Hammack, Richards, Luo, Edlynn, & Roy, 2004; Kliewer et al., 2004; Masten et al., 1999; Ozer & Weinsin, 2004; Sullivan, King, & Farrell, 2004).

A parallel movement also developed during this period in which some researchers advocated an almost exclusive examination of human strengths. One of the fundamental principles on which the emergent movement termed “Positive Psychology” is based is that humans possess strengths or assets that moderate negative mental and physical health outcomes (Seligman & Csikszentmihalyi, 2000). Additionally, the preventative properties of human strengths are likely to contribute to overall well-being and strengthen markers of positive development, such as social competence and self-esteem. One such asset that has gained some momentum in the literature with adult samples, and has been shown to correlate negatively with negative emotions and positively with psychological and social adaptation is hope (Kwon, 2002).

### *Hope theory*

To hope is “to desire with expectation of obtainment” (Merriam-Webster's collegiate dictionary, 1998, p. 880). A number of authors have magnified the construct's significance in proffering hope as an adaptive characteristic defined by “an overall perception that goals can be met,” implying the notion that people are goal directed (Snyder, et al., 1991, p. 570). Snyder & colleagues (1991) elaborated the previous conceptualization of hope, emphasizing that although goals provide an endpoint for hopeful thinking, they do not live in isolation from ideas regarding how one achieves such objectives (Snyder, 2005). As such, Snyder and associates (1991) define hope as a

goal-directed, iterative cognitive process comprised of *agency* and *pathways* thinking.

Pathways thinking is the capacity to develop routes to obtaining goals. A person must be able to generate at least one if not several means of achieving objectives, typified by the self-statements, “I can solve this problem” (Snyder, Lapointe, Crowson, & Early, 1998, p. 809). Moreover, a defining feature of pathways thinking involves the ability to think of alternative methods of goal acquisition when paths are impeded. Agency thinking involves one’s motivation to pursue goals. Without, agency thinking, that is, the belief that one has the capacity to enact potential paths to reach one’s goals, characterized by the self-statement, “I can do it” and “I’m not going to be stopped” (p. 809), desired ends are unlikely to come to fruition. Conversely, an inability to think of possible routes to obtaining goals will also thwart their realization. Within this framework, goals may be temporally distal or proximal, and vary in magnitude, but are only pursued if they are of adequate import to the person in whom goals originate (Snyder, Cheavens, & Sympton, 1997).

According to Snyder, Cheavens, and colleagues (1997), pathways and agency thinking begins to develop nearly at birth as a result of (pathway) cognitions pertaining to 1) the perception of exogenous stimuli, 2) the time sequences of occurrences, and 3) the creation of goals. As infants become cognizant of their environment and their own wants and begin to relate events that occur in tandem, they begin to formulate goals to satiate such desires. In addition, cognitions relating to 1) self-recognition, and 2) and recognition of self as an initiator of actions, along with the creation of goals constitute the core properties of agency thoughts. In summary, agentic thinking, which stems from thoughts pertaining to self and self as precipitator of goal-directed actions, and pathways thinking

provide the foundation on which hope is based (Snyder et al., 1997). A child's sense of hope is thought to be established around toddlerhood and crystallized by adolescence, with the exception of a traumatic occurrence during the developmental period. Although hope is primarily dispositional (Snyder, Cheavens, et al., 1997), it may be enhanced through sustained interventions, (Snyder, Rand, King, Feldman, & Woodward, 2002).

Hope theory contends that early responses to impediments to obtaining goals may ultimately determine individual differences in hope. For example, most people (and especially children) experience negative and positive affect when goals are thwarted or attained, respectively (Snyder, Cheavens, et al., 1997). Youth who are able to accomplish goals after having encountered adversity or an obstacle experience a higher degree of positive emotions when their goal is attained, as compared to when they encountered no obstacles in reaching their goal (Snyder, Harris, et al., 1991). It appears that children who manage to achieve goals despite impediments may become better equipped to deal with adversity as they develop. Such children are likely to be high in hope. Both high and low-hope youth experience barriers as initially stressful, and experience negative emotions when the barrier proves intractable. However, high-hope individuals are more likely to interpret events as challenging than stressful, and therefore, more likely to successfully cope when stress does arise, as agentic and pathways thinking are applied to the challenge (Snyder, 2002). Empirical evidence corroborates the previous postulation as high-hope individuals achieve goals more than low-hope individuals (Snyder et al., 1991). These high-hope children may be characterized as "resilient," (Masten, 1999; Rutter, 1994). Consistent with resiliency theory, hope may serve as a

protective factor for the adequate functioning of youth in the face of above average difficulties, for example, exposure to school violence.

### *Hope and similar constructs*

While hope theory is related to theories of optimism, self-efficacy, self-esteem, and problem-solving (see Snyder, 2002, for a review), it is sufficiently distinctive as a construct to support its discriminant validity. For example, optimism, as conceptualized by Scheier and Carver (as cited in Snyder, 2002), parallels hope in that it is a stable, overall perception relating to expectations that certain paths will lead to certain outcomes (pathways thinking), but the model does not include an agency component. Bandura's conceptualization of self-efficacy (as cited in Snyder, 2002) exemplifies agentic thinking in its postulation that one's self-belief that one can perform a given behavior to effect a desired outcome is critical to obtaining that outcome. However, this formulation of self-efficacy is situation specific and most critical prior to initiating a goal sequence, whereas agentic and pathways thinking in the hope conception are involved at all stages of goal acquisition, and are relatively stable across situations. Snyder (2002) emphasizes that both agentic and pathway cognitions underlie the concept of hope; both components of the model interact as individuals approach or recede from their goals.

### *Hope theory*

#### *Hope and problem behaviors*

According to the hope model, positive and negative emotions are a result of self-perceptions of how one is doing with regard to goal-related activities (Snyder, 2002). Consistent with depression theory (Snyder, 2002), hope theory predicts that when people are confronted with barriers to important goals that they are unable to attain via

alternative pathways and reciprocal agentic thinking, they often succumb to despair and disempowerment, and subsequently, relinquish their goals (Snyder et al., 1998). The recognition that behaviors are ineffective in obtaining desired goals results in negative emotions, cognitions and behaviors akin to those characteristic of depression. Thus, within the conceptualization of hope, depression emerges from failures in achieving goals reflected by lower hope scores (e.g., Snyder, Hoza, et al., 1997), rather than the inverse. Similarly, self-esteem, defined as one's beliefs regarding overall effectiveness (Hewitt, 1998), is also conceptualized as flowing from successes and failures in obtaining goals, on which constructs of self-esteem are implicitly based (Snyder, 2002). Therefore, higher levels of hope, denoting more successful goal acquisition, should be inversely related to internalizing behaviors and directly related to a positive self-concept.

The underpinnings of hope theory may also be extended to the manifestation of externalizing behaviors. High-hope compared with low-hope youth are adept at developing multiple solutions to problems. The likelihood that these individuals would become entrenched in maladaptive behaviors for which they are unlikely to be reinforced, and out of which they could not extricate themselves in order to generate more productive pathways to goals should be mitigated. Further, as mentioned previously, because high-hope youth are more successful at achieving goals than low-hope youth, they are less likely to experience persistent negative affect such as anger when goals are obstructed. As some research has identified a relationship between anger and aggression (Del Barrio, Aluja, & Spielberger, 2004), high-hope individuals may be protected against experiencing enduring emotions that may increase risk for engagement in aggression.

### *Hope and social competence*

Hope theory not only implies inverse relationships with problem behaviors but also implies positive associations with social competence supporting hope as a promising human strength. Hopeful thinking is generally learned within the context of a community including significant figures in a child's life such as caregivers and friends (Snyder, Hoza, et al. 1997). A child's goals and beliefs reflect this community, as children are reflective of the effects of goals and standards within the context in which they are developed (Snyder, Cheavens, et al., 1997). In addition, children become cognizant that personal goals are more likely to be achieved if one can recruit others to support and share in their goals, while reciprocating such gestures to others. This often requires modification of goals between parties in an effort to obtain the necessary cooperation to obtain goals (Snyder, Cheavens, et al., 1997).

The skill set implicitly and explicitly involved in developing and sustaining high hope as detailed above converges on definitions of social-emotion skills/competence. These social and emotional skills encompass prosocial behaviors such as cooperation and maintaining relationships, the ability to control aggressive behaviors and emotional reactivity, and the awareness of the feelings and thoughts of others (Aviles, Anderson, Davila, 2006; Kress & Elias, 2006). Accumulating evidence in the social and emotional learning area (SEL) suggests social skills confer advantages to youth in all facets of life (e.g., Cohen, 2006; Zins, Weissberg, Wang, & Walberg, 2004). Thus, according to the hope conception of the context in which the construct is developed, high-hope youth should be more socially adept than low-hope youth.

### *Hope and academics*

Hope theory suggests that high-hope youth should excel in academics and remain vitalized in the face of academic challenge. Such students should have and set clear educational goals, they should be able to generate multiple strategies in acquiring pertinent knowledge in order to achieve academic goals, and they should wield the motivation required to sustain the relevant pathways to obtaining those goals (Snyder, 2005). Additionally, they should be less prone to destructive, emotional reactivity including negative self-talk as a result of impediments to achieving goals, but rather, refocus their energies on finding alternative routes to achieving objectives (Onwuegbuzie & Snyder, 2000). Thus, these youth may continue to attend to their ultimate goal rather than allowing their thoughts to succumb to rumination or other negative coping tools.

### *Research Findings*

#### *Adults*

By and large, the empirical research on hope research has utilized adult samples. Studies have demonstrated that hope plays a crucial role in the lives of adults. Hope has been associated with a number of positive psychological, academic and physical outcomes (Chang, 1998; Curry, Maniar, Sondag, & Sandstedt, 1999; Reff, Kwon, & Campbell, 2005). Curry, Snyder, Cook, Ruby, & Rehm (1997) found that female college student athletes who reported higher levels of hope performed better in a number of activities at the Big 8 Conference than their lower hope counterparts, even after controlling for innate physical ability according to coach reports. Higher levels of hope predicted final test results for college students enrolled in a psychology class, even after partialing out variance explained by three course exams taken previously (Snyder et al., 1991). Although studies are few, hope has also been demonstrated to act as a buffer



against adjustment issues involving difficult life circumstances. In a study of maternal distress in caring for children with chronic physical disabilities, high-hope mothers reported less distress than low-hope mothers when caregiver disability-related distress was high (Horton & Wallander, 2001). However, at low levels of disability-related distress, low- and high-hope mothers reported similar levels of distress, indicating a buffering effect.

### *Children and Adolescents*

Recent research focusing on hope in children and adolescents evidence, similarly to adult findings, that the hope mechanism is critical to youth outcomes across a spectrum of areas in one's life, including optimism and problem-solving abilities (Snyder, 1994b). A number of correlational studies have established inverse relationships between psychopathology and measures of psychological adaptation. For example, Gilman, Dooley, & Florell (2006) found that high-hope youth reported significantly more global life satisfaction, personal adjustment, and less distress than their low and average hope counterparts. McNeal and associates (2006) administered a psychosocial intervention aimed at improving the levels of hope in 155 10-17 year olds who met criteria for an array of psychological and behavioral issues in a residential care setting. Over a 6-month period, increases in hope were associated with diminished levels of psychopathology on the Diagnostic Interview Scale for Children (DISC; Costello, Edelbrock, Kalas, Kessler, & Klaric, 1982). In a large sample of 8-16 year olds, negative associations between hope and depression, and positive associations between hope and self-esteem were yielded (Snyder, Hoza, et al., 1997). The researchers suggested that one's sense of self-worth should flow from self-perceptions of overall effectiveness reflected by hopeful thoughts

related to goals. Similarly, depression was postulated to be a result of hope rather than the inverse, as failures in goal acquisition reflected by lower hope scores likely lead to feelings of disempowerment and sadness. Several studies have shown that hope, indeed, may precede self-esteem and depression, as hope has been manipulated to effect positive changes in both variables, lending support to hope theory (Snyder, et al., 1996).

*Hope and social competence.* Findings indicate that high-hope individuals have better interpersonal relationships (Kwon, 2002), report more social competence (including behavioral, athletic and scholastic areas), and are more satisfied with their looks (Snyder, Hoza, et al., 1997). In contrast, low-hope individuals report significantly more fears related to interpersonal relations, more loneliness, and tend to be unforgiving of others (Thompson, Snyder, et al., 2002).

*Hope and academics.* Hope has been linked to success in the academic domain using child and adolescent samples in addition to college populations. Hope has been shown to significantly predict achievement even when intelligence, or in studies sampling college students, previous examination results, were controlled (Snyder, Hoza et al., 1997). One study extended previous work by examining hope as a buffer in academic failure (Snyder et al., 1991). The researchers investigated whether high- and low-hope students would be differentially affected by feedback characterized by a poor grade. Results indicated that high hope youth's agentic and pathways thinking scores were enhanced as a result of poor feedback, whereas the reverse findings were yielded for their low-hope counterparts. The authors suggested that adversity seemed to set the stage for high-hope youth to become even more motivated to cope with challenge. Such an explanation is conceptually tied with stress and coping theory whereby appraisals of stress as challenge rather than

threat are associated with problem and positive emotion-focused coping (Lazarus & Folkman, 1985). In a similar vein, correlations between problem-focused coping and hope have been found (Sigmon & Snyder, 1990).

*Hope and adversity among youth.* Currently, few studies have examined hope in relation to stressful circumstances, utilizing child samples. Barnum, Snyder, Rapoff, Mani, & Thompson (1998) compared 14 adolescent burn survivors with a matched sample of their peers on a number of psychosocial variables. Groups were collapsed, as there were no significant differences between them. Results indicated that high hope predicted fewer externalizing behaviors, over and beyond the variance accounted for by social support, but was a weak predictor of internalizing behaviors. Higher hope and social support scores independently predicted a greater degree of global self-worth.

Valle, Huebner & Suldo (2006) set out to establish whether hope serves as a “psychological strength” by investigating its stability, its ability to predict later levels of enhanced life satisfaction and diminished psychopathology, and finally, its ability to buffer difficult life events in a sample of adolescents. Findings indicated that hope scores test-retest reliability were moderate (.47) over a 1-year duration, indicating hope is relatively stable. Second, higher levels of hope predicted later life satisfaction, controlling for baseline levels. Hope scores also predicted subsequent internalizing behaviors, but not externalizing behaviors. It was suggested that the significant correlation between externalizing behaviors at Time 1 and Time 2 might have precluded the prediction of externalizing behaviors at Time 2. Finally, initial high levels of hope moderated the impact of negative life events with regard to internalizing behaviors and life satisfaction.

*Exposure to violence and hope.* One previous study investigated the relationship between exposure to direct and indirect violence more generally and hope using the Children's Hope Scale (Snyder, Hoza, et al., 1997) in an inner-city sample of adolescents (Hinton-Nelson, Roberts, & Snyder, 1996). Results indicated that lower levels of victimization were associated with higher hope, but contrary to the authors' prediction, higher levels of witnessing violence were associated with higher levels of hope and personal predictions of death due to non-violent causes. However, the aforementioned study did not examine the protective properties of hope in moderating psychopathology. Further, possible positive outcomes with which the construct may be associated were not investigated.

#### *Hope and hopelessness*

The only other hope-related instrument that measures individual differences in hope in children is the Hopelessness Scale (Kazdin, Rodgas, & Colbus, 1986). In contrast with the current study's measure of hope (Snyder, Hoza et al., 1997), which examines a child's positive expectancies about the self and future, the Hopelessness Scale measures a child's negative expectancies about the self and the future. As the absence of negative expectancies is not synonymous with having positive expectancies, Snyder, Hoza and colleagues (1997) hypothesized that the two measures would be very weakly and inversely related. Findings from the hope validation study indicated that, indeed, the two scales were negatively associated, but the relation did not reach significance (Snyder, Hoza et al., 1997).

Nevertheless, research investigating hopelessness among low-income, ethnic-minority children suggests that hopelessness is associated with a host of negative outcomes (Bolland et al., 2005; Durant et al., 1994), similar to relations found for

children who report lower levels of hope. For example, Bolland (2003) investigated the relation between hopelessness and risky behaviors in a longitudinal study sampling 2,468 low-income, inner-city adolescents. Hopelessness predicted violent, aggressive and sexual behavior, as well as accidental injury. Hopelessness and its correlates were investigated in another study sampling 927 normal and clinical adolescents, representing a cross section of social classes (Spirito, Williams, Stark, & Hart, 1988). The study population was derived from urban, suburban, and rural areas, and the racial/ethnic composition was largely representative of national rates. Results indicated that hopelessness was positively related to depression, and inversely related to social skills and self-esteem.

*Research findings: summary*

Research findings on internalizing and externalizing behaviors in youth with higher vs. lower levels of are somewhat mixed, but by and large, the literature depicts hope as inversely correlated with problem behaviors and positively associated with indices of mental, physical, and behavioral health. In addition, several studies indicated linkages among higher levels of hope, social competence, academic competence, and self-esteem. Although few studies have examined the protective properties of hope, some research has found hope to be a moderator of adjustment issues under duress (e.g., Valle et al., 2005). Consistent with positive psychology principles (Seligman & Csikszentmihalyi, 2000), hope research findings suggest that the construct might be a human strength that buffers youth from negative psychosocial outcomes and strengthens benchmarks of healthy development. To date, the hope literature has not indicated

significant differences in hope levels by gender, age, socioeconomic status, or ethnicity/race.

### Current Study

From an ecological framework, minority youth often experience obstacles that are distinct from majority groups due to their minority status (Phinney, 1990). For example, African American children and adolescents developing in urban communities are particularly at risk for witnessing violence in their neighborhood and schools (Buka et al., 2001; Richters & Martinez, 1993). The persistence of witnessing and being directly victimized at school is particularly disturbing, although studies investigating the impact of direct and indirect exposure in the academic domain are limited. However, in the face of significant environmental challenges over and beyond those experienced by majority groups, most of these youth manage to prevail over the threat such challenges pose to their development. Extant research suggests that higher levels of hope may be an important feature serving to moderate the negative effects of difficult life circumstances. Thus, the purpose of the current study is to investigate the protective effects of hope in the linkages between exposure to school violence and psychological and behavioral functioning.

More specifically, the proposed study has the following objectives: First, the prevalence of exposure to school violence will be reported. Second, the study aims to examine direct and vicarious victimization experiences of school violence and its relationship with internalizing and externalizing behaviors, as well as other measures of positive adaptation. Third, as positive psychology constructs such as hope have been associated with other benchmarks of healthy development and negatively associated with

maladjustment, analyses will investigate whether hope is associated with social competence, self-esteem, and academic competence, and inversely related to problem behaviors. Finally, as prior research has not investigated the protective effects of hope in relation to exposure to violence, hope will be examined as a potential buffer of problem behaviors and other measures of psychological and behavioral functioning in the context of school violence.

### *Hypotheses*

The following hypotheses were arrived at via a review of the existing empirical and relevant theoretical work regarding the effects of exposure to violence and hope on mental health and behavioral outcomes:

#### I. Preliminary hypotheses:

- i. Exposure to direct school and indirect school violence and externalizing behaviors will be positively associated.
- ii. Hope will be positively associated with social competence, self-concept and academic competence, and yield a negative relationship with internalizing and externalizing behaviors.

### *Exploratory questions*

Due to equivocal findings regarding a few of the phenomena this study intends to explore, several questions rather than a priori hypotheses were proposed. First, as mentioned earlier, the link between exposure to violence and internalizing behaviors among low-income, minority youth samples has been mixed. Some research findings indicating a link between violence and internalizing symptoms found that girls tend to report more of such symptoms than boys (e.g., Moses, 1999). Second, studies exploring

gender differences in relation to exposure to community violence and aggression have not uncovered a consistent pattern (e.g., Attar, Guerra & Tolan, 1994), though the broader developmental literature consistently indicates boys exhibit more aggressive behaviors than girls. Finally, although evidence suggests exposure to violence can impact a child's self-esteem and disrupt academic competence, fewer studies have explicitly examined its relation with social skills. Taken together, the evidence to date suggests the following related questions:

- I. Will there be a positive relationship between direct and indirect exposure to school violence and internalizing behaviors? Will differential effects be yielded for boys and girls, such that exposure will be associated with higher levels of internalizing behaviors for girls but not for boys?
- II. Will boys be more likely to exhibit externalizing behaviors in relation to exposure to violence than girls?
- III. Will direct and indirect victimization experiences be inversely related to social skills, self-concept and academic competence?

In addition, hope has not been examined as a possible resiliency factor for children exposed to direct and indirect school violence. Although hope research has not uncovered gender, ethnic or socioeconomic-status related differences in reported levels of the construct, as mentioned previously, the violence literature has shown some differential effects by such demographic variables for both prevalence and symptom manifestation. This suggests the following series of analyses involving hope:

- I. Will hope exercise a buffering effect such that the link between exposure to school violence and higher levels of externalizing and internalizing symptoms,



and lower levels of social skills, self-concept, and academic competence will be mitigated for youth reporting higher levels of hope? Will the moderating effects of hope differ by gender, ethnicity or socioeconomic status?

## METHOD

### Participants and Setting

The proposed study will analyze relevant data derived from a broader longitudinal, primary prevention research program evaluating the outcomes of a multi-year, social and emotional curriculum conducted in Plainfield, New Jersey. Plainfield has been designated an Abbott district by the state department of education, a term reserved for the poorest urban communities in which children are at statistically higher than average risk for problem behaviors, academic failure, and dropout. Plainfield is predominately an African American community with a rapidly growing Latino population. Approximately 80% of the students receive free or subsidized lunch, an index of financial need.

The study sample is comprised of 176 5<sup>th</sup> graders drawn from eight classes, spanning four elementary schools. Participants' ages ranged from 9 to 12 ( $M = 10.26$ ,  $SD = .62$ ); the majority of youth were ages 10 (70%) and 11 (20%). The ethnic and gender composition of the participants is 52.0% female, 48.0% male and 81.6% African American, 16.8% Latino, 1.1% Caucasian, and .6% Asian.

### *Demographic Information*

Teachers completed surveys documenting the gender, grade level, age, and ethnicity of each student in their respective classes.

### Measures

### *Exposure to Violence*

Frequency of exposure to direct and indirect violence was assessed with the Victimization Scale (Nadel, Spellmann, Alvarez-Canino, Lausell-Bryant, & Landsberg, 1996), an instrument included in the Centers for Disease Control and Prevention's compendium of approved violence-related youth measures (Dahlberg, Toal, & Behrens, 1998). Students indicated how often they had been victimized at school (5 items) or witnessed a multitude of aggressive/violent acts at school (5 items) since the onset of the academic year (see Appendix 1). Individual items are rated as "never" (1), "once" (2), "several times" (3), or "often" (4). Indirect and direct victimization experiences were analyzed separately. Sample victimization items include, "At school, how often have you been threatened with a knife or sharp weapon?" Scores are tallied by summing responses according to whether items ask about indirect or direct exposure to school violence. A modified version of the scale was utilized. Psychometric properties have been reviewed as adequate by those compiling the compendium (Dahlberg et al, 1998), the only measure so designated for a population similar to that being studied here.

### *Hope*

The Children's Hope Scale (CHS) (Snyder, Hoza, et al., 1997), a self-report measure developed for children between the ages of 8 to 16 was used to assess hope (see Appendix 2). This scale is a downward extension of the adult version of the Hope Scale (Snyder et al., 1991). The instrument includes 6 items that are evenly divided between agency and pathways factors, and are rated on a Likert-type scale ranging from 1 (*none of the time*) to 6 (*all of the time*). The agency subscale is an index of a child's belief in his ability to initiate and sustain a goal sequence, for example, "I think the things I have done

in the past will help me in the future.” The pathways subscale is an index of a child’s belief in his ability to generate paths to achieving goals, for example, “When I have a problem, I can come up with lots of ways to solve it.” The CHS has been used with normal and clinical samples and has demonstrated adequate reliability with both populations. Internal consistency for CHS ranges from .70 to .86 with a test-retest reliability of .73 after a one-month period (Snyder et al., 1997). More recently, Valle and colleagues (2006) demonstrated the CHS has a moderate 1-year test-retest reliability of .47, lending support for the construct as a stable, dispositional variable. As the developers of the measure intended the aggregation of the agency and pathways components due to their theoretical relatedness, full-scale scores will be used. Additionally, Pearson’s product moment correlation indicated that the two factors were highly correlated ( $r = .62, p < .01$ ).

#### *Problem behaviors and Social Skills*

Teachers completed the Social Skills Rating System Survey (SSRS-T; Gresham & Elliott, 1990), a teacher report measure, for each student in their classes (see Appendix 3). The SSRS-T is an instrument that identifies the extent to which youth demonstrate social and academic competence, as well as problem behaviors, and includes three scales that assess social skills, problem behaviors, and academic competence. The SSRS-T is a version of the SSRS that includes only the primary items loading most highly on each subscale.

*Problem behaviors.* The following two of the three sub-domains of the SSRS-T Problem Behavior’s scale will be used in the current study: externalizing problems (i.e., verbal or physical aggression towards others, poor anger regulation, and arguing), and

internalizing problems (anxiety, sadness, loneliness), which yield a total of 8 items, 4 per subscale (see Appendix 4). The instructions directed teachers to record the overall frequency with which students performed specific behaviors over the past month or two, with individual items rated as “never” (0), “sometimes” (1), or “very often” (2). Teachers were to report externalizing behaviors including, for example, how often the student “talks back to adults” and “argues and fights with others.” Additionally, teachers completing surveys reported internalizing symptoms. Sample items inquire into how often the student “acts sad or depressed” and “appears anxious in groups.” Problem behavior scores are generated by summing the relevant items for each subscale.

*Social skills/competence.* The SSRS-T social skills domain assesses prosocial behaviors via three sub-scales encompassing cooperation (i.e., demonstrates helping and sharing behaviors, and adheres to class rules), assertion (i.e., responds to others) and self-control (i.e., appropriately responds to conflicts) (see Appendix 4). Teachers rated the frequency with which each student demonstrated described behaviors as “never” (0), “sometimes” (1), or “very often” (2). Sample items for cooperation, assertion, and self-control are, “keeps desk clean and neat without being reminded,” “initiates conversations with peers,” and “responds appropriately when pushed or hit by other children,” respectively. Social skills scores are generated by summing the relevant items for each subscale.

For the SSRS-T Social skills and Problem behavior subscales, coefficient reliability ranged from .83 to .84 for Social skills, and .73 to .88 for Problem behaviors. The SSRS-T coefficient alphas for the Social Skills and Problem Behaviors scales are .94

and .88, respectively. Gresham and Elliot (1990) reported a 4-week test-retest correlation of .85 for Social Skills and .84 for Problem Behaviors skills.

*Academic Competence.* The SSRS-T Academic Competence scale assesses overall academic functioning. Teachers rated each student in their classes on a 5-point scale based on percentages (1 = lowest 10%, 2 = next lowest 20%, 3 = middle 40%, 4 = next highest 20%, 5 = highest 10 %). The scale items encompass reading and mathematic performance, reading skills, academic motivation, and parental support (see Appendix 4). The Coefficient alpha for the Academic Competence scale is .95, with a 4-week test-retest correlation of .93.

#### *Self-concept/self-esteem*

Students completed a modified version of the Piers-Harris (PH) Children's Self-Concept Scale (Piers & Harris, 1984), which was standardized on children and adolescents ranging in ages of 8 to 18 with at least a third grade reading ability. The original measure contains 80 items rated yes or no. Six subscales yield an overall self-concept score: (1) behavior, (2) intellectual and school status, (3) physical appearance and attributes, (4) anxiety, (5) popularity, and (6) happiness and satisfaction (see Appendix 5). The modified version of the PH that was utilized in the proposed study consists of 44 items, was adjusted to include the same subscales as the original while eliminating cross-loading items. Psychometric analyses of the revised composite score is highly reliable ( $r = .86$ ) and stable over a 6-month period ( $r = .73$ ) (Dilworth, Mokrue, & Elias, 2002; Elias, Beier, & Gara, 1989).

#### Procedures

The teacher and student surveys were administered in the fall of 2000 as a part of the pretest assessment battery for a longitudinal social and emotional development and problem behavior prevention research project. Prior to the onset of data collection, a letter from the Superintendent informed parents of the project's content, objectives, and level of student involvement. Shortly thereafter, parents were sent consent forms and provided with an "opt-out" option, where they could call or return a signed consent form if they did not want their child to participate in the evaluation component of the study.

Trained, undergraduate research assistants administered study surveys to the students in each class. Research assistants read instructions aloud to the students prior to starting the questionnaires. Survey items were also read aloud, while providing ample time between items for the children to enter responses. Project research assistants provided teachers with the SSRS-T and a demographic form to complete for each student in their classes, and were compensated appropriately.

## RESULTS

The primary aims of the study were to: (1) Report the prevalence of exposure to school violence; (2) Investigate the relationship between direct and vicarious victimization experiences of school violence with internalizing and externalizing behaviors, as well as social skills, self-concept and academic competence; (3) Examine whether hope is associated with social skills, self-concept, and academic competence, and inversely related to internalizing and externalizing behaviors; (4) Investigate whether hope moderates the relationship between exposure to school violence and problem behaviors, social skills, self-concept, and academic outcomes.

### Preliminary Analyses

### *Sample*

Data from one hundred sixty one 5<sup>th</sup> graders were used in the analyses. Students for whom we did not have sufficient data points (i.e., less than two thirds of the total number of items completed for a given subscale) for two or more study variables were omitted from analyses (N = 12). Three students were removed because they were not African American or Latino. T-test analyses on the study variables were conducted to examine the existence of group differences between the study sample and the group excluded (N = 15). No significant differences were yielded. Demographic information was obtained from surveys completed by teachers. The mean age of participants was 10.22 (SD = .61). The gender and ethnic composition of the sample was 53% girls, 47% boys, 82% African Americans and 18% Latinos. Approximately 73% of the participants qualified for reduced or free lunch, and index of low-socioeconomic status; 27% did not qualify for lunch benefits.

### *Power Analysis*

Power analyses were conducted to determine the minimum number of subjects required to adequately test study hypotheses based on recommendations by Cohen (1992). With the desired level of power set at .80, for a medium effect size with alpha set at .05, a sample size of 64 was recommended to assess mean differences between independent samples. Using the same parameters, for correlation statistics, a sample size of 85 is desired to provide appropriate power for comparisons (Cohen, 1992). A sample size of 67 is recommended for multiple regressions using two predictors, and 76 for those using three for a power of .80, for a medium effect size with alpha set at .05 (Cohen,

1992). In the majority of the study analyses, the number of subjects used met the minimum required to discern significant results at a power of .80.

### *Descriptive Statistics*

#### *Means and standard deviations of focal variables*

Means and standard deviations for focal variables are presented in Table 1. Descriptive statistics indicated that, on average, during a period of approximately 3 months, students were exposed to direct victimization ( $M = 9.79$ ,  $SD = 3.61$ ) and vicarious victimization ( $M = 11.54$ ,  $SD = 3.80$ ) between one and several occasions. An examination of the hope variable indicated that, on average, participants' experienced a sense of hope *most of the time* ( $M = 26.53$ ,  $SD = 6.20$ ). These results are consistent with reported mean values for the diverse samples of youth, including those with chronic illness and attention deficit/hyperactivity disorder on which the scale was normed. On average, participants reported above average self-concept scores ( $M = 71.76$ ,  $SD = 6.48$ ), with ratings in the in the 94<sup>th</sup> percentile in comparison to the normative group on which the scale was standardized. Teacher-completed surveys indicated that, on average, the sample demonstrated middle levels of externalizing behaviors ( $M = 3.17$ ,  $SD = 3.86$ ), internalizing behaviors ( $M = 2.66$ ,  $SD = 3.34$ ) and social skills ( $M = 40.43$ ,  $SD = 14.62$ ), and the sample performed slightly below average in academic competence ( $M = 24.83$ ,  $SD = 7.61$ ). More specifically, males demonstrated lower academic competence than the normed sample. Overall, the current sample exhibits more variability on the SSRS-T in comparison to the groups on which scales were normed (Table 2).

#### *Prevalence of Exposure to Violence*



The first objective of the study was to report the prevalence of exposure to direct and indirect violence in our sample of 5<sup>th</sup> grade children. Frequency analyses demonstrated a high prevalence of violent incidents on the school premises, with higher rates for witnessing violence. As the victimization measure administered in this study only recorded frequencies of exposures spanning approximately 3 months, it is critical to frame our interpretation of the data as a conservative depiction of the amount of victimization this sample of youth is likely to have been exposed when considering lifetime prevalence. The majority of this sample of 5<sup>th</sup> graders (N = 161) experienced direct victimization (83.2%; N = 134) and indirect victimization and (93.2%; 150) on one occasion or more. Tables 3-5 present the percentages of students exposed to aggression/violence indexed by the victimization scale at varying frequencies (i.e. once, a few times, often). Percentages are presented for the overall sample, as well as by gender, ethnicity and socioeconomic status.

There are several results from this detailed profile of exposure to victimization among the study sample that are worth highlighting. Approximately 23% of the students were often hit, 19.3% were often kicked or pushed, 5.6% were often threatened with a sharp knife or weapon, 23.6% were often verbally harassed or threatened, and 7.5% were often robbed. Rates for frequently witnessing these types of victimization experiences were even higher. Approximately 35.4% of the children often witnessed another student hit, 36.6% often witnessed another student getting kicked or pushed, 9.9% often witnessed a student getting threatened with a sharp knife or weapon, 31.1% often witnessed a student getting verbally harassed or threatened, and 8.7% often

witnessed a student getting robbed. Overall, frequencies of witnessing violence were even more pervasive than direct victimization.

T-test analyses indicated that males and females were exposed to similar frequencies of overall violence, as well as specific victimization items indexed by our survey. However, several differences emerged for specific violence exposure items for ethnic and socioeconomic analyses. African Americans were more likely to witness someone being threatened with a knife or sharp object [ $M = 1.57$ ,  $SD = 1.03$ ;  $t(52.79) = 2.15$ ,  $p < .05$ ] than Latinos ( $M = 1.22$ ,  $SD = .7$ ), and more likely to witness others being verbally harassed or threatened [ $M = 2.77$ ,  $SD = 1.17$ ;  $t(154) = 1.97$ ,  $p = .05$ ] than Latinos ( $M = 2.29$ ,  $SD = 1.15$ ). Participants who did not qualify for lunch benefits reported significantly more direct victimization through robbery [ $M = 1.79$ ,  $SD = 1.79$ ;  $t(158) = -2.02$ ,  $p < .05$ ] than students receiving reduced or free lunches ( $M = 1.45$ ,  $SD = .9$ ). Alternative t-values (equal variances not assumed) and corrected degrees of freedom were reported above whenever Levene's Test for Equality of Variances was significant.

#### *Frequency distributions of focal variables*

Prior to running further analyses, distributions were examined for all predictor and criterion variables. As one would expect, the internalizing and externalizing subscales of the SSRS-T were highly, positively skewed and leptokurtic; square root transformations were performed. Also as expected, a reflect and square root transformation was used to normalize the highly, negatively skewed and leptokurtic Piers-Harris self-concept scale. Transformed variables were used in the analyses that follow. All other study variables were normally distributed.

In addition, the frequencies of the two factors that comprise the hope scale, agency and pathways thinking were examined. Although hope theory posits the strong interrelationship between agency and pathways thinking and the developers of the measure intended for the aggregation of both factors for analytic purposes, with the underlying assumption being that scores on each factor should be comparable, this assumption warrants further investigation. For example, it would be important to discern, for purposes of theory and analyses, whether associated outcomes for children are different for those who arrive at a relatively higher hope score via a somewhat low score in pathways thinking or at a very high score in agency thinking via lower pathways thinking (versus the expected patterns). In order to explore the frequency of youth who were low in agency thinking, yet high in pathways thinking and visa versa, a chi-square test was run. Although low and high categories of hope tend to be arbitrary across the hope literature, recommended cutoffs from the originators of the measure were used (Hinton-Nelson, Roberts, & Snyder, 1996). Results indicated that only 1.3% (2) of youth were high in pathways thinking, but low in agency thinking, and 6.3% (10) were high in agency thinking, but low in pathways thinking. Agency and pathways scores were mostly comparable i.e., youth who were low in one factor were also low on the other factor. Due to the relatively high consistency of agency and pathways scores, further analyses used total hope scores.

#### *Group Differences on focal variables*

To assess mean differences between groups, T-test analyses were conducted by gender, ethnicity and SES. Gender analyses (Table 6) revealed that teachers rated boys as exhibiting a greater frequency of externalizing behaviors ( $t = -2.12, p < .05$ ) and

internalizing behaviors ( $t = -3.43, p < .01$ ) in comparison to girls. Female students were rated significantly higher in social skills ( $t = 3.50, p < .01$ ) and academic competence ( $t = 2.60, p = .01$ ) than their male counterparts.

T-test analyses conducted by ethnic membership (Table 7) revealed that teachers rated Latino students as exhibiting a greater frequency of social skills ( $t = -2.36, p < .05$ ) than African American students. Self-reports of self-concept indicated higher levels for African American students ( $t = 2.01, p < .05$ ) than Latino students, although, as noted earlier, both groups were relatively high. Finally, T-tests did not yield significant differences by socioeconomic status (Table 8). Thus the demographic was not controlled for, nor used as a potential moderator in the primary analyses. Because the number of participants in the Latino and the no lunch benefits groups did not have sufficient sample sizes according to Cohen's recommendations (Cohen, 1992), it is likely that sufficient power was not achieved to detect further mean differences. Due to inadequate power, ethnicity and socioeconomic status variables were omitted from the main analyses.

### Primary Analyses

With the exception of the SSRS-T Problem behaviors subscales (i.e., externalizing and internalizing behaviors) and the Victimization subscales (i.e., direct and indirect victimization), full scale scores were used for all statistical analyses. The specific examination of direct versus vicarious victimization allows for a clearer investigation of the independent relationships each shares with specific problem behaviors. Moreover, some evidence suggests that direct and indirect violence yield independent effects (Buka et al., 2001).

### *Correlations among focal variables*

The second objective of the current study was to investigate the relationship between direct victimization and witnessing violence and hope to externalizing and internalizing behaviors, and other measures of psychological and behavioral functioning (i.e., social skills, self-concept, and academic competence). Predicated on previous research, it was postulated that exposure to direct and indirect victimization would be positively associated with externalizing behaviors. In addition, the link between exposure to violence and internalizing behaviors was examined, as well as the link between direct and vicarious victimization with social skills, self-concept and academic competence.

First, relatedness among scales measuring positive and negative outcomes was examined (Table 9). Direct and indirect victimization scales were strongly associated ( $r = .62, p < .01$ ). Internalizing and externalizing scales were also strongly correlated ( $r = .48, p < .01$ ). For indices that further assess positive psychological and behavioral functioning, modest to strong correlations were yielded with social skills demonstrating strong associations with academic competence ( $r = .53, p < .01$ ) and a more modest association with self-concept ( $r = .19, p < .05$ ). Additionally, self-concept was correlated with academic competence ( $r = .26, p < .01$ ). Not surprisingly, strong, inverse relationships were found between externalizing symptoms and social skills ( $r = -.68, p < .01$ ) and internalizing symptoms and social skills ( $r = -.62, p < .01$ ).

Pearson's product moment correlations were performed in order to investigate the previously mentioned second objective (Table 9). As gender (dummy coded 0=female, 1=male) was associated with externalizing symptoms ( $r = .17, p < .05$ ), internalizing symptoms ( $r = .18, p < .01$ ), social skills ( $r = -.27, p < .01$ ) and academic competence ( $r = -.21, p < .05$ ), correlations were additionally run separately for boys (Table 10) and

girls (Table 11). The first hypothesis was partially supported by the correlational tests as direct victimization was positively and modestly correlated with externalizing behaviors ( $r = .18, p < .05$ ). The result disappeared for girls when gender was examined separately, but became stronger when examining the relationship for boys ( $r = .28, p < .05$ ). Contrary to the hypothesis, indirect victimization was not associated with externalizing symptoms. The link between exposure to violence and internalizing symptoms was only significant when looking at direct victimization for boys, yielding a moderate correlation ( $r = .31, p < .01$ ).

Correlations were used to examine the relationships between exposure to violence and positive measures of adaptation for the overall sample. Direct victimization was inversely related to social skills ( $r = -.19, p < .05$ ) and self-concept ( $r = -.34, p < .01$ ), and indirect victimization was inversely related to self-concept ( $r = -.29, p < .01$ ). For boys, direct victimization was inversely related to social skills ( $r = -.46, p < .01$ ), self-concept ( $r = -.31, p < .01$ ) and academic competence ( $r = -.29, p < .05$ ), and indirect victimization was inversely related to self-concept ( $r = -.29, p < .05$ ) and social skills ( $r = -.26, p < .05$ ). For girls, direct victimization was inversely related to self-concept ( $r = -.36, p < .01$ ), and indirect victimization was inversely related to self-concept ( $r = -.30, p < .01$ ).

Additionally, Pearson's product moment correlation was used to preliminarily assess the relationship between hope and measures of psychological and behavioral functioning, the study's third objective. As mentioned previously, evidence supports hope as a psychological strength that is positively related to mental and functional adaptation and inversely related to maladjustment. Thus, it was hypothesized that hope

would be positively associated with social skills, self-concept, and academic competence, and negatively associated with problem behaviors. Correlational tests revealed that hope was positively and moderately related to self-concept ( $r = .39, p < .01$ ) for the overall sample. This result was sustained when examining boys ( $r = .21, p < .05$ ) and girls ( $r = .30, p < .05$ ) separately. Contrary to expectations, hope was not significantly related to social skills, academic competence, internalizing or externalizing behaviors.

### *Regression analyses*

Prior to conducting regression analyses, the continuous independent variables were centered before computing interaction terms; centered variables were used in all regression analyses. Subsequent to centering the variables and conducting regression diagnostics, the predictor variables were assessed for multicollinearity by identifying tolerance values below .10. The tolerance values for the focal variables were all within an acceptable range.

Although the hope literature has not denoted gender differences in hope levels, previous research has demonstrated that the relationship between types of victimization and related symptomatology may be contingent on gender status. Therefore, all regression analyses were run separately for boys and girls in order to examine gender-specific effects and interactions. Additionally, separate regressions were computed for the two victimization subscales.

### *Hierarchical regression: problem behaviors as outcome variables*

A series of hierarchical regressions was conducted to further explore the relationship between exposure to victimization and problem behaviors. Specifically, the analyses investigated whether direct and indirect victimization would significantly and

uniquely explain variance in externalizing and internalizing behaviors. Two regressions were conducted for each problem behavior subscale (Table 12). In one of the regressions, direct victimization was entered first followed by indirect victimization. In the other regression, indirect victimization was entered followed by direct victimization. The results indicated that for boys, direct victimization, indeed, significantly contributed to explaining internalizing symptoms after accounting for indirect victimization ( $\Delta R^2 = .07$ ,  $F(2,71) = 3.73$ ,  $p < .03$ ). In contrast, indirect victimization did not contribute over and beyond direct victimization. In addition, direct victimization significantly accounted for externalizing symptoms at step one ( $R^2 = .08$ ,  $F(1,69) = 5.94$ ,  $p < .02$ ); indirect victimization did not significantly contribute to the prediction of the model. Direct victimization had a tendency to bring the combined model to significance when entered at step two ( $\Delta R^2 = .05$ ,  $F(2,69) = 2.93$ ,  $p = .06$ ). Indirect victimization was not significantly associated with internalizing or externalizing symptoms. Neither set of regression analyses conducted with girls was significant in explaining variance in internalizing and externalizing symptoms.

### *Moderator Analyses*

#### *Hierarchical regression: internalizing and externalizing behaviors as outcome variables*

In part, the fourth objective of the study was to examine the potential buffering effects of hope such that the relation between victimization experiences and problem behaviors would be attenuated when higher hope levels were apparent. Additionally, the main effects of hope in relation to problem behaviors were examined. The next series of regressions was conducted to assess whether hope would be inversely related to internalizing and externalizing symptoms, and whether higher levels of hope would



mitigate the effects of victimization experiences. Two regressions were run for each problem behavior (i.e., internalizing or externalizing behaviors), which was regressed onto victimization (direct victimization or indirect victimization) and hope, as well as a victimization by hope interaction. In one set of regressions, direct victimization was entered first, followed by hope, and finally, direct victimization x hope. In the other set of regressions, indirect victimization was entered first, followed by hope, and finally, indirect victimization x hope. Results indicated that for boys, aside from direct victimization, none of the proceeding steps contributed unique increments to internalizing behaviors ( $R^2 = .10$ ,  $F(1,71) = 7.54$ ,  $p < .01$ ) or externalizing behaviors ( $R^2 = .08$ ,  $F(1,69) = 5.944$ ,  $p < .02$ ). For girls, direct victimization, hope and their interaction, as well as the combination of variables were not significantly related to internalizing behaviors. Indirect victimization, hope and their interaction, as well as the combination of variables did not predict externalizing behaviors for boys or girls.

*Hierarchical regression: social skills, self-concept and academic competence as outcome variables*

The additional impetus of the fourth objective was to further explore the relationship between hope and social skills, self-concept and academic competence. Specifically, the protective properties of hope to moderate the impact of direct and vicarious victimization experiences on the previous measures of adaptation were investigated. The main effects of hope in relation to the aforementioned variables were also examined. Two regressions were run for each dependent variable (social skills, academic competence and self-concept). In the first set of regressions, direct victimization was entered first, followed by hope, and then, direct victimization x hope.

In the other set of regressions, indirect victimization was entered first, followed by hope, and then, indirect victimization x hope. Results for the first set of regressions indicated that for boys, hope made a significant contribution to the overall model in accounting for social skills ( $\Delta R^2 = .05$ ,  $F(2,66) = 11.12$ ,  $p < .001$ ) and self-concept ( $\Delta R^2 = .10$ ,  $F(2,71) = 8.41$ ,  $p = .001$ ), but not academic competence. The interaction between direct victimization and hope was not significant. Direct victimization ( $B = -.47$ ,  $t = -4.37$ ,  $p < .001$ ) and hope ( $B = .22$ ,  $t = 2.00$ ,  $p = .05$ ) uniquely accounted for variance in social skills (Table 13), with direct victimization as the strongest predictor for boys. Similarly, the direct victimization ( $B = -.33$ ,  $t = -3.02$ ,  $p < .01$ ) and hope ( $B = .32$ ,  $t = 2.92$ ,  $p < .01$ ) regression coefficients were significant in explaining variance in self-concept, with direct victimization as the strongest predictor (Table 14). Finally, direct victimization significantly accounted for variance in academic competence ( $R^2 = .09$ ,  $F(1,68) = 6.24$ ,  $p = .02$ ) (Table 13), but steps two and three did not add significant increments to the model. For girls, hope and direct victimization added a significant contribution to explaining self-concept ( $\Delta R^2 = .16$ ,  $F(2,84) = 16.39$ ,  $p < .001$ ), but not to social skills or academic competence. The interaction between direct victimization and hope was not significant. Similarly to their male counterparts, girls' direct victimization ( $B = -.29$ ,  $t = -3.10$ ,  $p < .01$ ) and hope ( $B = .36$ ,  $t = 3.53$ ,  $p < .001$ ) regression coefficients were significant in explaining variance in self-concept, although hope emerged as the strongest predictor (Table 14).

In order to ascertain the amount of variance in problem behaviors that was uniquely explained by the significant predictors, part correlation coefficients were computed and squared, revealing that for boys, direct victimization uniquely explained

22.09% and 10.89% of the variance in social skills and self-concept, respectively, and hope uniquely explained 4.41% and 10.00% of the variance in social skills and self-concept, respectively. For girls, direct victimization accounted for 8.41% and hope accounted for 10.89% of the variance in self-concept. The interaction between hope and direct victimization did not contribute to the significance of the models predicting social skills, self-concept, or academic competence for either gender.

The second set of regressions was identical to the first except that indirect victimization was entered at step one in lieu of direct victimization. The results indicated that steps two and three did not significantly add to the model predicting social skills beyond indirect victimization ( $R^2 = .08$ ,  $F(1,64) = 5.15$ ,  $p = .03$ ) for boys (Table 13), and none of the variables individually or in combination were associated with social skills for girls. A main effect for hope ( $\Delta R^2 = .09$ ,  $F(2,70) = 6.86$ ,  $p < .01$ ), significantly adding to the model explaining self-concept, was found for boys. Similar effects were found at step two in the regression run for girls ( $\Delta R^2 = .16$ ,  $F(2,83) = 13.09$ ,  $p < .001$ ). However, in the case of girls, the interaction between indirect victimization and hope entered at step three significantly enhanced the overall model accounting for variance in self-concept ( $\Delta R^2 = .06$ ,  $F(3,83) = 11.76$ ,  $p < .001$ ). For boys, indirect victimization ( $B = -2.29$ ,  $t = -2.66$ ,  $p < .05$ ) and hope ( $B = .32$ ,  $t = 2.82$ ,  $p = .01$ ) accounted for variance in self-concept when the effects of the other variables were partialled out; hope emerged as the strongest predictor of self-concept for boys. Results indicated that for girls, indirect victimization ( $B = -.27$ ,  $t = -2.83$ ,  $p < .01$ ), hope ( $B = .31$ ,  $t = 3.10$ ,  $p < .01$ ) and the interaction between indirect victimization and hope ( $B = .27$ ,  $t = 2.67$ ,  $p < .01$ ) were significant when the effects of the other were partialled out; similarly to boys, hope emerged as the strongest predictor of

self-concept for girls (Table 14). Part correlation coefficients were computed and squared, revealing that for boys, indirect victimization accounted for 8.41% of the variance in self-concept and hope accounted for 10.00% of the variance in self-concept. For girls, indirect victimization accounted for 6.76% of the variance in self-concept, hope accounted for 8.41 % of the variance in self-concept, and the interaction between indirect victimization and hope accounted for 6.25%. The interaction between indirect victimization and hope was plotted (Figure 1) using procedures recommended by Aiken and West (1991) and Dawson and Richter (2006). The indirect victimization x hope interaction indicated that girls with higher levels of hope reported higher levels of self-concept at low and especially high levels of indirect victimization, but there was no relationship for girls reporting low-levels of hope.

## DISCUSSION

### Summary of Results

The purpose of the study was to investigate the relationship between exposure to school violence and psychological and behavioral functioning, and to examine whether hope can buffer the effects of school violence in a sample of low-income, ethnic-minority, 5<sup>th</sup> grade students. Specifically, the objectives were: (1) to report the prevalence of exposure to school violence; (2) to examine the link between direct victimization and witnessing violence at school and indices of psychological and behavioral functioning; (3) to examine hope's relationship with indices of psychological and behavioral functioning; and (4) to investigate hope as a moderator of the relationship between exposure to school violence and indices of psychological and behavioral functioning.

Frequency analyses indicated that the majority of youth were exposed to direct victimization (83.2%) and indirect victimization (93.2%) on one occasion or more in the preceding three months. Overall, the majority of youth endorsing frequent experiences of direct victimization identified verbal harassment or threats and getting hit (23.6%) as the main occurrence. However, higher levels of direct victimization were also found for more serious incidents such as being threatened with a sharp knife or weapon (5.6%). Prevalence for witnessing violence was even higher for all types of violent incidents assessed. T-test analyses indicated that African American youth were more likely to witness someone being threatened with a knife or sharp object and verbally harassed or threatened than Latino youth. Perhaps not surprisingly, students with higher socioeconomic status were more likely to be robbed.

Several noteworthy results were revealed by descriptive and T-test analyses. Despite high levels of school violence to which the youth were exposed, overall, the sample was within normal mean ranges on all study variables. Teacher-rated measures indicated that students exhibited average levels of externalizing and internalizing behaviors, as well as social skills, and boys were rated slightly below average in academic competence compared to normative groups. Students reported average levels of hope, and above average levels of self-concept. In addition, teachers rated boys significantly higher in internalizing and externalizing behaviors than girls, and rated girls significantly higher in social skills and academic competence than boys. Latinos were rated higher in social skills than African Americans, and Latinos reported lower levels of self-concept, although levels of hope were high for both groups in comparison with normative samples.

The next objective of the study was to investigate the link between exposure to violence and measures of psychological and behavioral functioning. Regression analyses revealed that direct victimization uniquely explained variance in internalizing and externalizing symptoms when examining direct and indirect victimization in tandem. Contrary to expectations, witnessing violence was not significantly associated with internalizing or externalizing behaviors, although simple correlations showed a modest correlation between witnessing violence and externalizing symptoms. Also contrasting with expectations, none of the significant findings applied to girls.

Additionally, exposure to violence was examined in relation to explicit measures of positive adaptation. Regression analyses revealed that direct victimization significantly explained variance in social skills, self-concept and academic competence for boys, and explained variance in self-concept for girls, when hope was accounted for. Witnessing violence was also associated with social skills and self-concept for boys, and self-concept for girls. Exposure to violence was not associated with social skills and academic competence for girls.

The third objective of the study was to examine hope's link with psychological and behavioral indices. The hypothesis that hope would be positively associated with social skills, self-concept, and academic competence was partially supported by regression analyses. Hope was associated with self-concept and social skills for boys, and was associated with self-concept for girls.

Finally, the study sought to explore whether hope moderates between exposure to violence, internalizing and externalizing behaviors, social skills, self-concept and academic competence. Overall, hope did not moderate the impact of exposure to school

violence on problem behaviors and other measures of mental and behavioral health.

However, a significant, though, weak, interaction was found between witnessing violence and hope and self-concept in girls. The finding suggests that high levels of hope may serve to buffer the effects of witnessing violence on girls' self-concept.

### Explanation of Results

#### *Prevalence*

The first goal of the study was to report the frequency of direct and indirect victimization in a sample of low-income, ethnic-minority children. Similar to previous studies, a substantive number of youth were directly victimized and witnessed violence on more than one occasion (Farrell & Sullivan, 2004; Gorman-Smith, Henry & Tolan, 2004; Miller, Wasserman, Neugebauer, Gorman-Smith, & Kamboukos, 1999; Sullivan, King, & Farrell, 2004). Additionally supported by the literature, a higher percentage of youth witnessed violent incidents compared with direct victimization (Flannery et al., 2004), although the rates for both were quite high. In contrast to some previous literature, prevalence rates of direct and indirect victimization were not significantly higher among boys (e.g., Schwab-Stone et al., 1995, Singer et al., 1995). Thus, boys and girls were equally at risk for exposure to violence on the school premises.

Despite high prevalence rates, this sample of youth was rated mostly within normal ranges on study variables, supporting the predominance of resilience in such communities (e.g., Durant et al., 1994).

#### *Exposure to school violence*

#### *Internalizing and externalizing behaviors*

The second goal of the study was to investigate the independent linkages between direct and vicarious victimization experiences at school to internalizing and externalizing behaviors. Consistent with previous research, direct victimization was associated with internalizing and externalizing behaviors (DiNapoli, 2003; 1994; Farrell & Sullivan, 2004; Kliwer, 2004). Although prevalence rates for witnessing violence were higher than direct victimization, witnessing violence did not significantly account for variance in problem behaviors, contrasting with some previous research (Flannery et al., 2004). One study sampling a large group of low-income, ethnic-minority high school students, found that direct victimization was associated with distress and hostility, but witnessing violence involving acquaintances and strangers was not associated with distress (Moses, 1999). It was proposed that youth exposed to high levels of violence become desensitized to their environment as a means of coping. It is possible, given the high prevalence of witnessing school violence, that such incidents became somewhat normative. In the immediate sense, desensitization may allow youth to avert distress with little disruption to psychological and behavioral functioning, but the long-term effects of such resilience are likely to have negative consequences, such as a lack of empathy for others. Current findings suggest that indirect victimization was not sufficiently distressful to produce problem behaviors over and beyond direct victimization.

In contrast with the results of the present study, prior research found connections between exposure to violence and problem behaviors among girls as well as boys. Moreover, in the current sample, girls scored significantly lower in internalizing symptoms than boys, although most previous research shows the opposite effect (Foster, Kuperminc, & Price, 2003; Moses, 1999). As research shows boys behave more



aggressively than girls, it is likely that such behaviors attract teachers' attention, and in turn, may lead teachers to be more attentive to the existence of internalizing behaviors in boys, or more likely to ascribe internalizing behaviors as a cause of externalizing behaviors. Alternatively, the problem behavior variables were especially negatively and highly skewed for girls, therefore, the detection of significant results for girls due to restricted range may have been an issue.

*Social skills, self-concept, and academic competence*

The second objective of the study sought to examine the link between exposure to violence and social skills, self-concept and academic competence. Higher levels of direct victimization and witnessing violence explained variance in social skills for boys. This finding is not surprising considering the extensive support linking exposure to violence with aggression (Farrell & Sullivan, 2004; McCabe, Lucchini, Hough, Yeh, & Hazden, 2005). Although demonstrating comparatively fewer social skills is not tantamount to demonstrating externalizing behaviors, evidence shows impairment in social relations among aggressive children (Crick & Dodge, 1994; Nolen-Hoeksema, 1994). More to the point, higher levels of exposure to violence have been inversely associated with social competence (Cooley-Quille, Turner, & Beidel, 1995). Additionally consistent with previous research, poorer academic outcomes were found for those directly victimized (Glew et al., 2006). Results indicating moderate to strong negative associations between direct and indirect victimization and self-concept/esteem are also consistent with previous research (Buckner, Beardslee, & Bassuk, 2004). Children may experience diminished self-esteem because they feel powerless to stop or reduce the levels of violence to which they are exposed. Finally, self-concept was the only outcome variable to which exposure

to violence was associated for girls. The results suggest that frequency of exposure to violence does not significantly relate to social skills deficits for girls.

*Hope and psychological and behavioral adjustment*

The third goal of the study investigated the hypothesis that hope would be positively related to social skills, self-concept and academic competence, and inversely related to problem behaviors. The hypothesis was partially confirmed, as hope was associated with self-concept, consistent with previous research (Barnum et al., 1998; Snyder, Hoza, et al., 1997). However, inconsistent with hope theory and some related empirical work, problem behaviors were not inversely related to hope. For example, Valle, Huebner, and Suldo (2004) found that hope was inversely related to internalizing and externalizing behaviors in a sample of adolescents. However, more in line with the current results, another study examining hope and social support as predictors of psychological adjustment in early to late adolescent burn survivors found that hope was a weak predictor of internalizing symptoms (Barnum, Snyder, Rapoff, Mani, & Thompson, 1998), yet hope was a moderate predictor of externalizing symptoms.

One possible explanation for divergent results in the literature and a failure to find inverse relations between hope and problem behaviors in the current study is the diverse methods researchers use to investigate individual differences in hope and associated outcomes. For example, some studies retain hope as a continuous measure, others employ a median split to separate the sample into low-hope and high-hope categories (which may in fact only be low and high relative to that sample), and others only examine the segment of their sample that falls into the upper and lower quartiles. Thus, differences in outcomes across studies may be attributed to various methodological approaches to

investigating hope. Another possible explanation why some of the current findings deviate from previous research is that the current study sample is slightly younger than those used in the previous studies. Although age has not been denoted as a moderator of hope levels and associated outcomes, to the author's knowledge, this is only other study to use a sample of 5<sup>th</sup> graders aside from the validation study of the hope scale, which sampled 8-16 year olds (Snyder, Hoza, et al., 1997). As such, previous findings may not apply to this sample.

Consistent with empirical and theoretical work, hope predicted social skills for boys, although differential gender effects in relation to hope and social skills are inconsistent with the literature (Kwon, 2002; Snyder, Hoza, et al., 1997). Hope levels in this sample of youth did not significantly relate to academic competence, although other evidence suggests such a link (Snyder, Hoza, et al., 1997). One possible explanation is that the majority of studies examining the association between hope and academics have used college-age samples, thus results may not apply to elementary-age youth. In the psychometric validation study of the hope scale, a relation was found in a sample of 8-16 year olds. However, academic competence was recorded via youths' self-perceptions of scholastic achievement, in contrast to the current study's teacher-rated measure of academic competence. It is possible that teacher-rated vs. student self-report of scholastic performance yield discrepancies in child samples.

#### *Hope as a moderator*

The final objective of the study was to investigate the potential protective properties of hope in the context of exposure to violence, making this the first study to conduct such an investigation. Overall, findings indicated that hope did not significantly

moderate between exposure to violence and problem behaviors, social skills, self-concept, and academic competence. However, one finding indicated that girls who reported higher levels of hope were buffered from the effects of witnessing violence on self-concept, particularly when violence levels were higher. This pattern is consistent with a “protective-enhancing” (Luthar, Cicchetti, & Becker, 2000) effect, in which adjustment increases with increased risk. A moderator is typically activated during higher levels of stress in which individuals are provided with the opportunity to cultivate and implement coping skills (Lazarus & Folkman, 1984). Nevertheless, hope did not moderate between direct victimization and self-concept, suggesting that proximity to violence may moderate outcomes, with increasing degrees of proximity conferring additional threat (Lynch & Cicchetti, 1998). No relationship was found for girls reporting lower levels of violence.

### Implications

The current findings suggest that exposure to violence is significantly associated with a host of negative outcomes for which African American and Latino males who are directly victimized are at particular risk. Although overall, exposure to violence was not significantly related to areas of adjustment for girls, much of the previous literature has found such links, with some suggesting females are more at risk than males for specific symptoms (Schwab-Stone et al., 1995). Thus, the impact of violence exposure on the development of both genders must continue to be considered. It is also important to note that much of the youth violence literature focuses on adolescent samples, in contrast with this sample of 5<sup>th</sup> graders. Thus, age may play a moderating role for females whereby symptomatology due to violence exposure might manifest at a later point in their

developmental trajectory. Despite the fact that witnessing violence did not significantly explain problem behaviors, some research has found witnessing violence to be predictive of adjustment issues (Flannery et al., 2004), and thus, should also continue to be investigated.

Due to the correlational nature of the study, it cannot be determined whether exposure to violence caused adjustment issues, or whether youth with adjustment issues were more likely to place themselves in situations in which violence exposure was more likely to occur, or whether a third variable mediated between predictor and criterion variables. That said, some longitudinal research assessing the trajectory of violence exposure and associated outcomes found chronic exposure to violence predicted increases in drug use, problem behaviors, attitudes supporting violence and decreases in valuing achievement (Farrell & Sullivan, 2004; Gorman & Tolan, 1998; Lynch and Cicchetti, 1998, Miller et al, 1999). Perhaps, at a minimum, exposure to violence and adjustment issues may have a reciprocal relationship. Nonetheless, based on previous research, there is little reason to believe that youth with adjustment issues are more likely to witness violence, although, it is certainly plausible that youth with adjustment issues may be more likely to be victimized.

Given the number of linkages between exposure to school violence adjustment issues, along with previous research suggesting increased risk over time, violence in the school setting must be reduced, first and foremost. Systemic as well as individually geared interventions, such as counseling may contribute to reductions in violence. In particular, interventions that focus on the development of social and emotional competencies may benefit youth manifesting problem behaviors and skills deficits. Such

interventions would help youth find the words to express experiences of being personally attacked or seeing violence perpetrated on others, and help them manage subsequent emotions so that they are less intrusive in the academic context. Further, such programs help youth develop assertiveness skills in the face of violence, as well as the skills for nonviolent problem solving and conflict resolution.

The high prevalence of exposure to school violence clearly demonstrates that school is not a safe haven for many young children. Further, the findings imply that school personnel (or their interventions) were ineffective in counteracting violence, or that staff chose not to intervene. The high rates of witnessing violence revealed in this study show that incidents do not transpire so surreptitiously as to elude detection by other students. However, it is possible that school staff were less aware of the prevalence. One study that surveyed 911 urban youth on their experience of heightened school surveillance as a result of ‘zero tolerance’ measures that disproportionately affect minority youth found that less than half of the sample reported feeling comfortable going to a teacher or a counselor if they needed help (Fine, Freudenberg, Payne, Perkins, Smith, & Wanzer, 2003). Further, one in three males reported verbal abuse from police, and over half were stopped and frisked. Narratives collected from a small sub-group reported instances of being disrespected by authority figures, felt mistrusted and criminalized by adults, and a number of youth felt little hope that injustices could be mitigated. Taken together, youth may not disclose violent incidents because of feelings of distrust, betrayal and a lack of confidence that school personnel can or will do their best to protect them from harm. As the current study found that students who were exposed to higher levels of violence reported lower levels of self-esteem, it is likely that youth develop negative self-

perceptions in part, because adults' failure to protect them from such harms may transmit the message that they are unworthy of being kept safe.

In the current study, higher levels of violence did not significantly impact the students' sense of hope, as youth reported average levels of hope that were not significantly associated with their experiences of violence. However, overall, the current study suggests that hope does not adequately protect youth from negative outcomes, and as such, cannot be recommended as an intervention target for violence exposure at this juncture. It is possible that higher hope levels confer advantages to youth in certain difficult contexts and not others, buffering youth from certain behaviors and not others. It is also plausible that the degree of control over the stressor mediates the extent to which hope can operate as a moderator. As such, exposure to violence may constitute an environmental stressor over which most youth have little control, and is, therefore, less amenable to the buffering effects of hope. Further, in contrast with hope theory, knowledge of hope levels may not be sufficient in explaining variance in psychological and behavioral functioning in youth. In a study sampling children and adolescents with sickle cell disease, Lewis and Kliewer (1994) found a negative association between hope and anxiety, but only after taking specific coping strategies into account.

However, the current study found that higher levels of hope were associated with higher levels of self-concept at elevated rates of witnessing violence for females. As one preliminary study found self-concept to mediate between exposure to violence and internalizing symptoms (Buckner, Beardslee, & Bassuk, 2004), interventions targeting hope levels for female witnesses of violence may be useful to the extent that one's self-esteem is a product of hope, which has been substantiated by some evidence (Snyder, et

al., 1996). Programs that foster the development of viable strategies to dealing with violence, especially when strategies are thwarted (pathways thinking), as well as developing children's beliefs in their ability to carry out and sustain a plan (agency thinking) for reducing violence are likely to engender feelings of empowerment and a positive sense of self.

In summary, the prevalence of direct victimization and witnessing violence to which youth were exposed should be of national concern. Further, the impact of violence exposure appears to have deleterious psychological and behavioral effects on children, spanning such areas as internalizing and externalizing symptoms, self-concept, social skills and academics. Prevention and intervention efforts that solely target the individual are likely to be insufficient in inciting change in the level of violence to which youth are exposed; rather, school personnel will also need to play a bigger role. In addition, officials wielding decision-making capabilities at the local and state level whose policies could significantly reduce levels of violence and other markers of environmental markers of disadvantage at the school, community and family level must relinquish policies and practices that continue to place low-income, African American and Latino youth at a significant disadvantage.

#### Suggestions for Future Research

This is the first study to examine the protective properties of hope in relation to direct victimization and witnessing violence. Overall, this study's failure to reveal hope's potential protective properties should not be viewed as unequivocal. Rather, replication is necessary. Future studies investigating exposure to school violence and associated outcomes, as well as the role of potential protective factors such as hope could be



enhanced in several ways. First, the current study should be replicated with larger samples. Bigger and more representative samples in terms of ethnicity, race, age, as well as socioeconomic status would facilitate an investigation of whether such variables, along with hope, moderate mental and behavioral outcomes in violence exposure. In addition, larger samples would allow for more sensitive statistical analyses using recommended cutoffs to analyze youth that are truly high and low in hope to determine the question of when and for whom higher levels of hope could potentially moderate outcomes in difficult circumstances. However, as few ethnic-minorities were included in the hope validation study (Snyder, Hoza et al., 1997), and SES was not examined, at this juncture, it would be difficult to assess that which constitutes low, average, and high hope in low-income, ethnic-minorities in an absolute sense, given the absence of norms parallel to the current study sample.

Second, although all people have an overall sense of hope, a preliminary study found that participants reported varying levels of hope in different life domains (Simpson & Snyder, 1997). Thus, the specific examination of hope levels in the context of violence exposure might be critical to unveiling its potential buffering effects. In addition, as perceived control of violence may impact children's hope levels, investigating the extent to which youth feel they can control the violence to which they are exposed might also contribute to our understanding of the situations in which hope may moderate outcomes.

Third, future research should investigate whether types of coping behaviors used (i.e., active, supportive, distraction) moderate hope in predicting adjustment issues in the context of school violence. Such an approach may elucidate the predictive power of hope.

Fourth, as overall, the sample demonstrated average levels on indices of adjustment and above average levels of self-concept despite the high prevalence of violence, it is likely that the youth, and females in particular, benefited from protective factors not assessed by the study. Given that research suggests that such variables as lower degrees of family conflict (Miller et al., 1999), social support (Hammack et al., 2004), and religiosity (Barkin et al., 2001) protect youth from psychopathology in the context of violence exposure, future research may explore the mutual operation of hope and established protective factors in accounting for mental health and behavioral outcomes.

Fifth, future studies would also benefit from a longitudinal design. An examination of the effects of exposure to violence over time, controlling for previous levels of exposure as well as psychological and behavioral functioning would allow for investigations of causality.

Finally, future research may benefit from the insight of student narratives, first and foremost, as well as those of teachers and parents. Soliciting the personal experiences and reflections of youth and teachers on violence could enrich research, and in turn, enrich interventions targeted at such communities. In this vein, Mahiri and Conner (2003) conducted a study in which they examined students' reflections of their personal experiences of violence and perspectives on violence and other issues in popular culture. Findings indicated that the youth had a complex understanding of the origins and perpetuation of violence in their ecology and were able to critically analyze the negative features of violence and crime, both of which informed how they negotiated, mitigated and averted violence and its influence. Insight into the resiliency factors that protect so

many of these youth from negative trajectories might also be gleaned from such narratives.

Violence prevention curricula informed and flexibly shaped by the personal testimonies of youth benefits both researchers and the communities with which they work, thereby enhancing our understanding of the issues with which youth contend. A partnership approach to research may be especially critical given that research and intervention efforts around violence often target low-income minority communities and are implicitly value laden. This may subliminally transmit the message to children that they are the problem that must be amended. Interventions should provide students with the opportunity to explore their own values, and the contexts in which they become relative, rather than offer curricula to which students must conform that may or may not appropriately address the idiopathic realities of their community and the type of support of which they are in dire need (Daiute, Stern, & Lelutiu-Weinberger, 2003). Extending a bigger voice to the children, parents and teachers on whom our research centers would empower community members to help shape and reconfigure the research, interventions and policies that impact their current and future lives. Furthermore, they are likely to have some of the expertise to do so.

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## **APPENDICES**

### Appendix 1: Victimization Scale (Nadel et al., 1996)

#### **Things That Happen**

Please circle the answer that best tells how much of the time each of the things below has happened since the start of the school year.

At School, how often have you been:

	Never	Once	A few times	Often
1. Helped by a student.	1	2	3	4
2. Praised or been given a put-up by a student.	1	2	3	4
3. Hit by a student.	1	2	3	4
4. Kicked or pushed by a student.	1	2	3	4
5. Part of a team or group that worked well together.	1	2	3	4
6. Threatened with a knife or sharp weapon.	1	2	3	4
7. Verbally called names or having things said to you that make you feel bad about yourself or afraid.	1	2	3	4
8. Robbed.	1	2	3	4
9. Praised by a teacher.	1	2	3	4

At School, how often have you seen OTHERS being:

10. Helped by a student.	1	2	3	4
11. Praised or been given a put-up by a student.	1	2	3	4
12. Hit by a student.	1	2	3	4
13. Kicked or pushed by a student.	1	2	3	4

	Never	Once	A few times	Often
14. Part of a team or group that worked well together.	1	2	3	4
15. Threatened with a knife or sharp weapon.	1	2	3	4
16. Verbally called names or having things said to you that make you feel bad about yourself or afraid.	1	2	3	4
17. Robbed.	1	2	3	4
18. Praised by a teacher.	1	2	3	4

## Appendix 2: The Children's Hope Scale (Snyder, Hoza, et al., 1997)

Hope Scale for Children

Answer the question based on **how much of the time the sentence is true for you.**

	A little of the time	Some of the time	Most of the time	All of the time
1. I think I am doing pretty well.	1	2	3	4
2. I can think of many ways to get the things in life that are most important to me.	1	2	3	4
3. I am doing just as well as other kids my age.	1	2	3	4
4. When I have a problem, I can come up with lots of ways to solve it.	1	2	3	4
5. I think the things I have done in the past will help me in the future.	1	2	3	4
6. Even when others want to quit, I know I can find ways to solve the problem.	1	2	3	4

## Appendix 3: Social Skills Rating Scale (Gresham &amp; Elliott, 1990)

**Social Skills Rating Scale**

To Teachers:

This questionnaire is designed to measure **how often** a student exhibits certain social skills in your classroom. Ratings of problem behaviors and academic competence are also requested. First, complete the information about the student and yourself.

Student's name: _____			Date: _____		
First	Middle Initial	Last			
School: _____		City: _____	State: _____		
Grade: _____		Birth Date: _____		Sex: <input type="checkbox"/> Female <input type="checkbox"/> Male	
Ethnic Group:					
<input type="checkbox"/> Asian	<input type="checkbox"/> Black	<input type="checkbox"/> Hispanic	<input type="checkbox"/> Native American	<input type="checkbox"/> Caucasian	
<input type="checkbox"/> Other (specify) _____					

Read each item on pages 2 and 3 (items 1-25) and think about this student's behavior during the past month or two. Decide how often the student does the behavior described.

If the student never does the behavior, circle the 0.

If the student sometimes does the behavior, circle the 1.

If the student very often does the behavior, circle the 2.

Here are two examples:	How Often?		
	Never	Sometimes	Very often
Shows empathy for peers.	0	1	2
Asks questions of you when unsure of what to do In school work.	0	1	2
This student <b>very often</b> shows empathy for classmates. Also, this student <b>sometimes</b> asks questions when unsure of schoolwork.			

**Please do not skip any items.** In some cases you may not have observed the student perform a particular behavior. Make an estimate of the degree to which you think the student would probably perform that behavior.

	How Often?		
	Never	Sometimes	Very often
1. Controls temper in conflict situations with peers.	0	1	2
2. Compromises in conflict situations by changing own ideas to reach agreement.	0	1	2
3. Says nice things about himself or herself when appropriate.	0	1	2
4. Invites others to join in activities.	0	1	2
5. Finishes class assignments within time limits.	0	1	2
6. Controls temper in conflict situations with adults.	0	1	2
7. Initiates conversations with peers.	0	1	2
8. Puts work materials or school property away.	0	1	2
9. Cooperates with peer without prompting.	0	1	2
10. Volunteers to help peers with classroom tasks.	0	1	2
11. Responds appropriately when pushed or hit by other children.	0	1	2
12. Ignores peer distractions when doing class work.	0	1	2

	How Often?		
	Never	Sometimes	Very often
13. Attends to your instructions.	0	1	2
14. Fights with others.	0	1	2
15. Has low self-esteem.	0	1	2
16. Threatens or bullies others.	0	1	2
17. Appears lonely.	0	1	2
18. Is easily distracted.	0	1	2
19. Interrupts conversations of others.	0	1	2
20. Disturbs ongoing activities.	0	1	2
21. Shows anxiety about being with a group of children.	0	1	2
22. Talks back to adults when corrected.	0	1	2
23. Gets angry easily.	0	1	2
24. Acts sad or depressed.	0	1	2



25. Fidgets or moves excessively.	0	1	2
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The next items require your judgment of this student's academic or learning behaviors as observed in your classroom. Compare the student with other children who are in the same classroom.

Rate all items using a scale of 1 to 5. Circle the number that bests represent your judgment. The number 1 indicates the lowest or least favorable performance, placing the student in the lowest 10% of the class. Number 5 indicates the highest or most favorable performance, placing the student in the highest 10% compared with other students in the classroom.

	Lowest 10%	Next lowest 20%	Middle 40%	Next Highest 20%	Highest 10%
26. Compared to other children in my Classroom, the <b>overall academic Performance</b> of this child is:	1	2	3	4	5
27. In <b>reading</b> , how does this child Compare with other students?	1	2	3	4	5
28. This child's <b>overall motivation</b> to Succeed academically is:	1	2	3	4	5
29. This child's <b>parental encouragement</b> To succeed is:	1	2	3	4	5
30. Compared with other children in my Classroom this child's <b>overall classroom Behavior</b> is:	1	2	3	4	5

## Appendix 4: Social Skills Rating System – Teacher Form Listed by Subscales

Cooperation
Finishes class assignments within time limits Puts work materials or school property away Ignores peer distractions when doing class work Attends to your instructions
Self-control
Controls temper in conflict situations with peers Compromises in conflict situations by changing own ideas to reach agreement Controls temper in conflict situations with adults Cooperates with peer without prompting Responds appropriately when pushed or hit by other children
Assertion
Says nice things about himself or herself when appropriate Invites others to join in activities Initiates conversations with peers Volunteers to help peers with classroom tasks
Externalizing
Fights with others Threatens or bullies others Talks back to adults when corrected Gets angry easily
Internalizing
Has low self-esteem Appears lonely Shows anxiety about being with a group of children Acts sad or depressed
Academic
Compared to other children in my classroom, the overall academic performance of this child is: In reading, how does this child compare with other students? This child's overall motivation to succeed academically is: This child's parental encouragement to succeed is: Compared with other children in my classroom this child's overall classroom behavior is:

## Appendix 5: Piers-Harris Children's Self-Concept Scale (modified version) by Subscale

<b>Popularity:</b>	My classmates make fun of me It is hard for me to make friends I am among the last to be chosen for games I am among the last to be chosen for games I have many friends People pick on me
<b>Happiness:</b>	I am a happy person I like being the way I am I wish I were different I am sad I am cheerful
<b>Intellectual &amp; School Status:</b>	I am smart I have good ideas I am good in my schoolwork I am slow in finishing my school work I can give a good report in front of the class I often raise my hand in school I am dumb about most things I forget what I learn I am a good reader
<b>Low Anxiety:</b>	I get nervous when the teacher calls on me I get worried when we have tests in school I am nervous I worry a lot I am often afraid I cry easily
<b>Positive Behavior:</b>	I am well-behaved in school I cause trouble to my family I do many bad things I behave badly at home In school, I am a dreamer I often get into trouble I do what I am told at home I am often mean to other people I get into a lot of fights I think bad thoughts I can be trusted I am a good person
<b>Physical Appearance:</b>	I am strong I have nice eyes I have nice hair I am good looking I have a nice face I am a leader in games and sport I have a good body

*Table 1: Descriptive statistics on focal variables.*

	Overall	Female	Male	African Americans	Latino	Free/reduced lunch	No lunch
Direct Victimization							
N	161	85	76	132	29	115	43
Mean	9.79	9.96	9.60	9.89	9.35	21.11	21.86
SD	3.61	3.63	3.60	3.71	3.15	6.99	5.85
Indirect Victimization							
N	158	84	74	130	28	115	43
Mean	11.54	11.87	11.17	11.70	10.79	21.11	21.86
SD	3.81	3.70	3.91	3.87	3.45	6.99	5.85
Hope							
N	159	85	74	130	29	115	44
Mean	26.53	25.93	27.21	26.91	24.80	26.43	26.80
SD	6.20	6.46	5.85	6.11	6.39	6.25	6.12
Social Skills							
N	148	79	69	123	25	109	39
Mean	40.43	44.24	36.1	39.18	46.58	39.33	43.51
SD	14.62	12.8	15.42	14.74	12.49	13.94	16.15
Internalizing Behaviors							
N	155	81	74	127	28	112	43
Mean	2.68	1.78	3.67	2.55	3.27	3.00	1.85
SD	3.39	2.76	3.74	3.24	4.00	3.55	2.81
Externalizing Behaviors							
N	153	81	72	125	28	111	42
Mean	3.21	2.61	3.88	3.38	2.41	3.41	2.68
SD	3.85	3.61	4.03	3.92	3.50	3.87	3.80
Academic Competence							
N	146	75	71	19	27	106	40
Mean	24.83	26.38	23.2	24.73	25.27	24.32	26.19
SD	7.61	8.01	6.85	7.76	7.05	7.75	7.14
Self-concept							
N	159	85	74	131	28	116	43
Mean	71.76	71.58	71.97	72.24	69.5	71.71	71.92
SD	6.48	6.98	5.89	6.39	6.51	6.83	5.5

*Table 2: SSRS-T Comparison of Normative Means to Current Sample Means.*

Measure	<u>SSRS-T</u>			
	Female		Male	
	Mean	SD	Mean	SD
Internalizing Behaviors				
Norm	3.00	2.40	3.60	2.50
Current Sample	1.78	2.76	3.67	3.74
Externalizing Behaviors				
Norm	2.60	2.70	3.10	3.30
Current Sample	2.61	3.61	3.88	4.02
Social Skills				
Norm	43.00	9.00	38.10	11.20
Current Sample	44.24	12.80	36.07	15.42
Academic Competence				
Norm	35.80	8.60	31.60	8.30
Current Sample	26.37	8.01	23.20	6.85

*Table 3: Percentage of sample exposed to a violent incident on one occasion during a 3-month period.*

	Overall n (and %) exposed	Female n (and %) exposed	Male n (and %) exposed	African American n (and %) exposed	Latino n (and %) exposed	Lunch benefits n (and %) exposed	No Lunch benefits n (and %) exposed
Direct Victimization							
Hit by a student	37 (23.0%)	20 (23.5%)	17 (22.4%)	27 (20.5%)	10 (34.5%)	25 (21.4%)	12 (27.3%)
Kicked or pushed by a student	38 (23.6%)	22 (25.9%)	16 (21.1%)	28 (21.2%)	10 (34.5%)	30 (25.6%)	8 (18.2%)
Threatened with a knife or sharp weapon	15 (9.3%)	9 (10.6%)	6 (7.9%)	13 (9.8%)	2 (6.9%)	10 (8.5%)	5 (11.4%)
Verbally harassed or threatened	25 (15.5%)	16 (18.8%)	9 (11.8)	17 (12.9%)	8 (27.6%)	16 (13.7%)	9 (20.5%)
Robbed	21 (13.0%)	10 (11.8%)	11 (14.5%)	17 (12.9%)	4 (13.8%)	10 (8.5%)	11 (25%)
Witnessed violence							
Seen student hit	27 (16.8%)	14 (16.5%)	13 (17.1%)	21 (15.9)	6 (20.7%)	19 (16.2%)	8 (18.2%)
Seen student kicked or pushed	26 (16.1%)	15 (17.6%)	11 (14.5%)	17 (12.9%)	9 (31.0%)	22 (18.8%)	4 (9.1%)
Seen student threatened with a knife or sharp weapon	17 (10.6%)	9 (10.6%)	8 (10.5%)	16 (12.1%)	1(3.4%)	13 (11.1%)	4 (9.1%)
Heard student verbally harassed or threatened	18 (11.2%)	7 (8.2%)	11 (14.5%)	16 (12.1%)	2 (6.9%)	18 (15.4%)	16 (36.4%)
Robbed	31 (19.3%)	14 (16.5%)	17 (22.4%)	29 (22%)	2 (6.9%)	21 (17.9%)	10 (22.7%)

*Table 4: Percentage of sample exposed to a few violent incidents during a 3-month period.*

	Overall n (and %) exposed	Female n (and %) exposed	Male n (and %) exposed	African American n (and %) exposed	Latino n (and %) exposed	Lunch benefits n (and %) exposed	No Lunch benefits n (and %) exposed
Direct Victimization							
Hit by a student	37 (23%)	24 (28.2%)	13 (17.1)	33 (25.0%)	4 (13.8%)	26 (22.2%)	11 (25.0%)
Kicked or pushed by a student	33 (20.5%)	17 (20.0%)	16 (21.1%)	29 (22.0%)	4 (13.8%)	22 (18.8%)	11 (25.0%)
Threatened with a knife or sharp weapon	5 (3.1%)	0 (0.0%)	5 (6.6%)	4 (3.0%)	1 (3.4%)	2 (1.7%)	3 (6.8%)
Verbally harassed or threatened	32 (19.9%)	21 (24.7%)	11 (14.5%)	2 (21.2%)	4 (13.8%)	20 (17.1%)	12 (27.3%)
Robbed	15 (9.3%)	12 (14.1%)	3 (3.9%)	10 (7.6%)	5 (17.2%)	11 (9.4%)	4 (9.1%)
Witnessed violence							
Seen student hit	42 (26.1%)	24 (28.2%)	18 (23.7%)	33 (25.0%)	9 (31.0%)	30 (25.6%)	12 (27.3%)
Seen student kicked or pushed	38 (23.6%)	22 (25.9%)	16 (21.1%)	32 (24.2%)	6 (20.7%)	25 (21.4%)	13 (29.5%)
Seen student threatened with a knife or sharp weapon	7 (4.3%)	4 (4.7%)	3 (3.9%)	6 (4.5%)	1 (3.4%)	5 (4.3%)	2 (4.5%)
Heard student verbally harassed or threatened	47 (29.2%)	28 (32.9%)	19 (25%)	36 (27.3%)	11 (37.8%)	31 (26.5%)	16 (36.4%)
Robbed	23 (14.3%)	15 (17.6%)	8 (10.5%)	13 (9.8%)	10 (34.5%)	16 (13.7%)	7 (15.9%)

*Table 5: Percentage of sample often exposed to violent incidents during a 3-month period.*

	Overall n (and %) exposed	Female n (and %) exposed	Male n (and %) exposed	African American n (and %) exposed	Latino n (and %) exposed	Lunch benefits n (and %) exposed	No Lunch benefits n (and %) exposed
Direct Victimization							
Hit by a student	37 (23%)	17 (20.0%)	20 (26.3%)	32 (24.2%)	5 (17.2%)	30 (25.6%)	7 (15.9%)
Kicked or pushed by a student	31 (19.3%)	16 (18.8%)	15 (19.7)	28 (21.2%)	3 (10.3%)	24 (20.5%)	7 (15.9%)
Threatened with a knife or sharp weapon	9 (5.6%)	4 (4.7%)	5 (6.6%)	8 (6.1%)	1 (3.4%)	8 (6.8%)	1 (2.3%)
Verbally harassed or threatened	38 (23.6%)	20 (23.5%)	18 (23.7%)	31 (23.5%)	7 (24.1%)	29 (24.8%)	9 (20.5%)
Robbed	12 (7.5%)	7 (8.2%)	5 (6.6%)	10 (7.6%)	2 (6.9%)	7 (6.0%)	5 (11.4%)
Witnessed violence							
Seen student hit	57 (35.4%)	30 (35.3%)	27 (35.5%)	50 (37.9%)	7 (24.1%)	40 (34.2%)	17 (38.6%)
Seen student kicked or pushed	59 (36.6%)	32 (37.6%)	27 (35.5%)	50 (37.9%)	9 (31.0%)	44 (37.6%)	15 (34.1%)
Seen student threatened with a knife or sharp weapon	16 (9.9%)	10 (11.8%)	6 (7.9%)	15 (11.4%)	1 (3.4%)	12 (10.3%)	4 (9.1%)
Heard student verbally harassed or threatened	50 (31.1%)	30 (35.3%)	19 (25%)	46 (34.8%)	4 (13.8%)	34 (29.1%)	16 (36.4%)
Robbed	14 (8.7%)	7 (8.2%)	7 (9.2%)	13 (9.8%)	1 (3.4%)	9 (7.7%)	5 (11.4%)



*Table 6: Group differences on focal variables by gender.*

Variable	Group	N	Mean	SD	t
Direct victimization	Female	85	9.96	3.63	.63
	Male	76	9.60	3.60	
Indirect victimization	Female	84	11.87	3.70	1.16
	Male	74	11.17	3.91	
Hope	Female	85	25.93	6.46	-1.30
	Male	74	27.21	5.85	
Externalizing	Female	81	1.10	1.21	-2.12*
	Male	72	1.50	1.27	
Internalizing	Female	81	0.84	1.04	-3.43**
	Male	74	1.47	1.23	
Social Skills	Female	79	21.99	6.48	3.50**
	Male	69	17.88	7.80	
Self-concept	Female	85	8.86	.45	-0.42
	Male	74	8.89	.38	
Academic Competence	Female	75	14.65	4.45	2.57*
	Male	71	12.89	4.45	

\*p&lt;.05, \*\*p&lt;.01, \*\*\*p&lt;.001

*Table 7: Group differences on focal variables by ethnicity.*

Variable	Group	N	Mean	SD	t
Direct victimization	African American	132	9.89	3.71	0.72
	Latino	29	9.35	3.15	
Indirect victimization	African American	130	11.70	3.87	1.15
	Latino	28	10.79	3.45	
Hope	African American	130	26.91	6.11	1.67
	Latino	29	24.80	6.39	
Externalizing	African American	125	1.36	1.25	1.57
	Latino	28	.95	.95	
Internalizing	African American	127	1.10	1.17	-1.01 <sub>a</sub>
	Latino	28	1.34	1.23	
Social Skills	African American	123	19.44	7.46	-2.36*
	Latino	25	23.20	6.30	
Self-concept	African American	131	8.91	0.41	2.01*
	Latino	28	8.73	0.42	
Academic Competence	African American	119	24.73	7.76	-0.33
	Latino	27	25.27	7.05	

\*p<.05, \*\*p<.01, \*\*\*p<.001 <sub>a</sub> as per the Levene's Test for Equality of Variance equal variances could not be assumed

*Table 8: Group differences on focal variables by SES.*

Variable	Group	N	Mean	SD	t
Direct victimization	Free/reduced lunch	117	9.75	3.74	- 2.50
	No lunch	44	9.90	3.30	
Indirect victimization	Free/reduced lunch	115	11.39	3.88	-0.83
	No lunch	43	11.95	3.62	
Hope	Free/reduced lunch	115	26.43	6.25	-0.34
	No lunch	44	26.80	6.12	
Externalizing	Free/reduced lunch	111	1.34	1.27	0.98
	No lunch	42	1.12	1.21	
Internalizing	Free/reduced lunch	112	1.25	1.20	1.88
	No lunch	43	0.86	1.10	
Social Skills	Free/reduced lunch	109	39.33	13.94	-1.54
	No lunch	39	43.51	16.15	
Self-concept	Free/reduced lunch	116	8.87	0.44	-0.24
	No lunch	43	8.89	0.35	
Academic Competence	Free/reduced lunch	106	24.32	7.75	-1.33
	No lunch	40	26.20	7.14	

\*p&lt;.05, \*\*p&lt;.01, \*\*\*p&lt;.001

Table 9: Intercorrelations among study subscales.

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Direct Victimization	--										
2. Indirect Victimization	.62 **	--									
3. Hope	-.06	-.12	--								
4. Externalizing	.18 *	.13	-.01	--							
5. Internalizing	.14	.04	-.08	.48 **	--						
6. Social Skills	-.19 *	-.05	-.03	-.68 **	-.62 **	--					
7. Self-concept	-.34 **	-.29 **	.39 **	-.05	-.11	.19 *	--				
8. Academic Competence	-.12	.04	.05	-.17 *	-.31 **	.53 **	.26 **	--			
9. Gender	-.05	-.09	.10	.17 *	.27 **	-.28 **	.03	-.21 *	--		
10. SES	.02	.07	.03	-.08	-.15	.13	.02	.11	-.02	--	
11. Ethnicity	-.06	-.09	-.13	-.13	.08	.19 *	-.16 *	.03	-.09	-.03	--

Gender: female=0; male=1

Ethnicity: African American=0; Latino=1

SES: free or reduced lunch=0; no free lunch=1

\* p &lt; .05

\*\* p &lt; .01

Table 10: Intercorrelations among study subscales (males).

Variable	1	2	3	4	5	6	7	8	9	10
1. Direct Victimization	--									
2. Indirect Victimization	.61 **	--								
3. Hope	.05	-.02	--							
4. Externalizing	.28 *	.18	-.19	--						
5. Internalizing	.31 **	.18	-.10	.54 **	--					
6. Social Skills	-.46 **	-.28 *	.19	-.70 **	-.67 **	--				
7. Self-concept	-.31 **	-.29 *	.30 *	-.19	-.23	.35 **	--			
8. Academic Competence	-.29 *	.03	.07	-.12 *	-.23	.48 **	.24	--		
9. SES	.07	.19	-.05	-.02	-.18	-.01	.03	.09	--	
10. Ethnicity	.03	-.06	.02	-.15	.04	.24	.01	.12	-.16	--
Ethnicity: African American=0; Latino=1					* p < .05					
SES: free or reduced lunch=0; no free lunch=1					** p < .01					

*Table 11: Intercorrelations among study subscales (females).*

Variable	1	2	3	4	5	6	7	8	9	10
1. Direct Victimization	--									
2. Indirect Victimization	.62 **	--								
3. Hope	-.13	-.17	--							
4. Externalizing	.10	.12	.11	--						
5. Internalizing	.01	-.06	.19	.36 **	--					
6. Social Skills	.02	.13	-.14	-.62 **	-.48 **	--				
7. Self-concept	-.36 **	-.30 **	.44 **	.04	-.03	.35 **	--			
8. Academic Competence	-.02	.06	.09	-.16	-.31 **	.52 **	.29 *	--		
9. SES	-.02	-.05	.09	-.12	-.12	.25 *	.01	.11	--	
10. Ethnicity	-.13	-.13	.22 *	-.09	.17	.13	-.26 *	-.06	.06	--
Ethnicity: African American=0; Latino=1					* p< .05					
SES: free or reduced lunch=0; no free lunch=1					** p < .01					

*Table 12: Summary of hierarchical regression analyses for ETV type predicting problem behaviors (males).*

Variable	$R^2$	$\Delta R^2$	$B$	$SE\ B$	$\beta$
Internalizing Behaviors					
1. Direct Victimization	.10	.10	.12	.04	.33*
2. Indirect Victimization	.10	.00	-.01	.05	-.02
1. Indirect Victimization	.03	.03	.06	.04	.18
2. Direct Victimization	.10	.07*	.11	.05	.33*
Externalizing Behaviors					
1. Direct Victimization	.08	.08	.10	.04	.28*
2. Indirect Victimization	.08	.00	.00	.05	.01
1. Indirect Victimization	.03	.03	.06	.04	.01
2. Direct Victimization	.08	.05	.10	.05	.28*

Note: ETV = exposure to violence. Betas from step at which variables were entered are reported. Results for girls were not reported as they were not significant.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

*Table 13: Summary of hierarchical regression analyses for ETV and hope predicting social skills and academic competence (males).*

Variable	$R^2$	$\Delta R^2$	$B$	$SE\ B$	$\beta$
<b>Social Skills</b>					
1. Direct Victimization	.21	.21	-2.00	.46	-.47***
2. Hope	.26	.05*	.84	.43	.21*
1. Indirect Victimization	.08	.08	-1.14	.47	-.29*
2. Hope	.11	.04	.86	.47	.22
<b>Academic Competence</b>					
1. Direct Victimization	.09	.09	-.56	.26	-.29
2. Hope	.09	.01	.15	.21	.09
1. Indirect Victimization	.00	.00	-.10	.22	.09
2. Hope	.01	.01	.15	.22	.09

Note: ETV = exposure to violence. Betas from step at which variables were entered are reported. Results for interactions and girls were not reported as they were not significant.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$



*Table 14: Summary of hierarchical regression analyses for ETV and hope predicting self-concept.*

Variable	Gender	$R^2$	$\Delta R^2$	$B$	$SE B$	$\beta$
Self-concept	Boys					
1. Direct Victimization		.10	.10	-.03	.01	-.33**
2. Hope		.20	.10**	.03	.01	.32**
3. Direct Victimization x Hope		.20	.00	.00	.00	-.50
1. Indirect Victimization		.08	.08	-.03	.01	-.29*
2. Hope		.17	.09*	.03	.01	.32*
3. Indirect Victimization x Hope		.19	.02	.00	.00	.14
	Girls					
1. Direct Victimization		.13	.13	-.04	.01	-.29**
2. Hope		.29	.16***	.04	.01	.36**
3. Direct Victimization x Hope		.30	.01	.00	.00	.12
1. Indirect Victimization		.09	.09	-.03	.01	-.27**
2. Hope		.24	.16***	.03	.01	.31**
3. Indirect Victimization x Hope		.31	.06**	.01	.00	.27**

Note: ETV = exposure to violence. Final beta weights are reported.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 1: Plots of Indirect Victimization  $\times$  Hope predicting self-concept (girls).

