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Violent Victimization and Perpetration: Joint and Distinctive Implications for Adolescent Development

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Abstract

To date few reports have provided direct comparison of psychosocial vulnerability and resources among youth with victimization and perpetration histories. Within a racially diverse, high-risk adolescent sample (n = 849), this study undertakes MANCOVA tests on a multidimensional set of risk and protective factors contrasting youth with histories of 1) neither violent victimization nor perpetration, 2) victimization only , 3) both perpetration only, and 4) both victimization and perpetration. All three violence-affected groups reported elevated risk and diminished protection, with perpetrating victims demonstrating the greatest psychosocial impairment. Detailed contrasts among the youth group profiles provide insights regarding overlapping and distinct developmental etiologies and implications for preventive and remedial intervention.

Keywords

adolescent perpetration; victimization; risk; protective; development

Despite gains made in reducing violence, rates for both perpetration by and victimization of adolescents remain disturbingly high, and constitute peaks in lifespan rates (Bureau of Justice Statistics, 2006). Moreover, violent victimization and perpetration have been identified as serious risk factors for impaired development in adolescence (Barnow, Lucht, & Freyburger, 2005; Smith, White, & Holland, 2003) with effects extending into adult roles and functioning (Brown, Craig, Harris, Handley, & Harvey, 2007; Liu & Kaplan, 2004). With the growing recognition of youth violence as a major public health problem has come increased pressure to develop effective prevention and early intervention programming (Surgeon General's Report, 2001).

In response, emerging perspectives extend criminologic foundations to incorporate developmental psychopathology and social contexts to more fully understand the etiology of violence-supportive pathways (Cohen, Hsueh, Russell, & Ray, 2006). Although linkages between child and adolescent violent victimization and violence perpetration have been extensively reported (see Maas, Herrenkohl, & Sousa, 2008 for a recent review), etiologic study of individuals with histories of victimization or perpetration has typically been undertaken in separate lines of research. Seldom has joint examination of these behaviors in adolescents allowed for direct comparisons and joint consideration of convergent or divergent developmental profiles and implications for programming needs.

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This study aims to address this gap through examining simultaneously the developmental implications of violent victimization and perpetration as both sole and overlapping experiences in the lives of adolescents. Hosser, Raddatz, and Windzio (2007) have noted that, although images of passive, innocent victims on the one hand and active, aberrant, violent perpetrators on the other are still prominent in the public eye and implicitly underlie much of current programming (Loeber, Kalb, & Huizinga, 2001), the reality is that the adolescent perpetrator and victim are often the same person. The ability to compare directly (1) youth who are free of violence histories with violence-affected youth as well as (2) points of convergence and divergence among violence-affected youth whose histories are solely victimization, solely perpetration, or include both victimization and perpetration represents a relatively unique contribution. We place this investigation within a risk and protective framework spanning variables at the individual, family, peer, and school levels that allows dual consideration of factors that can exacerbate, prevent and/or ameliorate the erosive effects of violence on healthy development. For this study, we use a broad measure of perpetration that spans physical aggression, emotional injury, and contemplating acts of violence. Our aim is to capture perpetration within a developmental context; including the kinds of acts and propensities in adolescence meaningful for both girls and boys and that serve as precursors for potential extension of perpetration into young adulthood (Cunningham, 2003; Widom, Schuck, & White, 2006). We first discuss the links between violent victimization and perpetration, particularly as they relate to developmental risk and protective factors.

Linking Victimization and Perpetration through Developmental Risk and Protective Factors

Victimization and perpetration of violence have been repeatedly linked (Maas et al., 2008) across multiple types of victimization. Adolescents who witness violence in their homes are more likely to become violent or aggressive themselves (Kracke, 2001; Reppucci, Fried, & Schmidt, 2002). Physical abuse has repeatedly been linked to delinquency and interpersonal violence in adolescence (Manly, Kim, Rogosch, & Cicchetti, 2001; Smith & Thornberry, 1995). Youth who are victims of abuse are at greater risk of themselves becoming abusive in adulthood (Fang & Corso, 2007; Widom, 1989). There are also links between victimization and later revictimization (Desai, Arias, Thompson, & Basile, 2002; Finkelhor, Ormrod, & Turner, 2007). Negative outcomes of victimization (Arata, 2002; Classen, Field, Koopman, Nevill-Manning, & Spiegel, 2001) indicate that victimization and trauma play a central role in the development and persistence of violent perpetration, although multiple mechanisms for this relationship have been proposed (Falshaw, Browne, & Hollin, 1996).

Both victimization and perpetration carry significant risk for impairment in adolescent development and maladaptive transition into early adulthood. Some of the strongest links are with emotional distress. Victimization has been associated with young adulthood depression, anger, hopelessness, and anxiety (Brown, et al., 2008; Higgins & McCabe, 2000). Youth perpetration also has been linked with emotional distress (Peled & Moretti, 2007; Prinstein, Boergers, & Vernberg, 2001), with anger being particularly prominent (Blake & Hamrin, 2007). Both witnessing and direct exposure to violence contribute to long-term psychological problems that extend into adulthood (Carlson, 1990; Kracke, 2001). Early indications of aggressive behavior are one of the strongest predictors of adult violent and criminal behavior (Temcheff et al., 2008; White & Widom, 2003).

Exposure to violence is often associated with other types of adversity, such as poor family functioning (Felitti, et al., 1998), nonviolent traumatic stressors (Wheaton, Roszell, & Hall, 1997), and social disadvantage (Lauristsen, 2003). The cumulative effect of other stressors serves to exacerbate the negative outcomes of violence (Finkelhor & Kendall-Tackett, 1997; Horowitz, Widom, McLaughlin, & White 2001). Research has pointed to the effects of life stress in addition to trauma research in increasing risk for posttraumatic stress disorder and

depression, as well as substance use (Kubiak, 2005; Lloyd & Turner, 2003). It is possible that prior adversity, including social disadvantage and non-violent stress, primes individuals who experience violence for higher likelihood of trauma-related symptoms (Kubiak, 2005). These studies have largely focused on the experience of victimization. Although perpetration of violence has been associated with a history of adverse circumstances, the effects of aggression in combination with lifetime stress have rarely been examined.

The relationship between risk-taking and both victimization and perpetration is complex. Associations with negative peers and individual risky behaviors are often outcomes of adverse experiences, and can provide new opportunities for perpetration and victimization (Lauritsen, Laub, & Sampson, 1992; Lauritsen, Sampson, & Laub, 1991). Similar interrelations are found for substance use; alcohol use is both a result of and contributor to violence (Clark et al., 2003; Thompson, Sims, Kingree, & Windle, 2008). Multiple mechanisms have been proposed for this, including associations with dangerous individuals and substance use and risk taking as coping following trauma (Dahlberg & Potter, 2001; Logan, Walker, Cole, & Leukefeld, 2001). The causes and correlates of this cluster of adolescent problem behaviors have yet to be thoroughly disentangled (Arthur, Hawkins, Pollard, Catalano, & Baglioni 2002).

Substantial research has accumulated on factors that promote positive development in the face of risk factors such as victimization. Evidence suggests that the effects of victimization on perpetration risk may be moderated or mediated by such factors as social support (Holt & Espelage, 2007; Scarpa & Haden, 2006), prosocial ties to school and peers (Morrison, Robertson, Laurie, & Kelly, 2002; Resnick, Ireland, & Borowsky, 2004), and positive family functioning (Aceves & Cookston, 2007; Gorman-Smith, Henry, & Tolan, 2004). Relationships with prosocial peers and adults may provide at-risk adolescents with the kind of alternatives and extra support they need to avoid violence-encouraging situations and people. Personal resources, such as self-esteem and coping abilities, can remediate effects of stressors and emotional distress, interrupting a course from victimization to negative outcomes and reducing the risk of violent aggression (Barnow et al., 2005; Scarpa & Haden, 2006). Additionally, research on aggression demonstrates that individuals with positive social skills and ties are able to resolve conflicts without resorting to violence (Lochman, Barry, & Pardid, 2003). Finally, engagement with school can provide connections to positive adults, opportunities for prosocial rewards, and bonding to peers (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004).

Targeting High Risk Populations to Inform Prevention Efforts

Given that violence experiences in childhood and adolescence increase risk of both subsequent violence and maladaptive functioning continuing into young adulthood (e.g., Liu & Kaplan, 2004; Widom & Maxfield, 2001), it is critical to prioritize preventive efforts with youth whose lives are characterized by risks associated with violence and/or who may be showing symptoms of violence effects. This targeted focus on risk-elevated adolescents is complementary to representative national sampling that builds on universal approaches (all adolescents) as well as to youth in juvenile justice or clinical mental health settings. Moreover, recent work is indicating greater heterogeneity than previously assumed in both victimized and perpetrating groups (Nurius, Russell, Herting, & Thompson, 2008; Odgers et al., 2007) arguing for use of person-oriented analysis to help illuminate distinctions in risk and protective factor profiles among high-risk youth to improve intervention programs.

In the study of the effects of violence on development, examination of the independent and joint relationships of victimization and perpetration is an area of central need. Recent work by Hanish and Guerra (2004) compared groups of elementary age children: those who bully (perpetrating against age peers), passive victims (being peer bullied), aggressive victims

(both bullying and being bullied), and youth uninvolved in either perpetration or victimization. Consistent with other research (Schwartz, Proctor, & Chien, 2001), aggressive victimized children merit particular concern as they are at higher risk of negative developmental outcomes across multiple domains and for high levels of peer rejection. Children who were bullying without being bullied reported higher exposure to family and community violence, suggesting developmental shifts into more stable victimization and perpetration patterns in adolescence. These and related childhood findings (Rubin et al., 1995; Scholte, Engels, Overbeek, de Kemp, & Haselager, 2007) argue the need to extend investigations into adolescence—when violence involvement rises dramatically—to discern commonalities and distinctions that can inform tailored programming to best meet differing needs.

The current study provides the needed examination of community, school-based adolescents who are at-risk for school dropout. Universal prevention programs that target factors such as anti-violence attitudes are useful, but targeted approaches that focus on youth with elevated risk factors or showing early symptoms of violence disorders are needed to reach high-risk individuals. Specifically, in this study we aim to: (1) characterize adolescents relative to their violence involvement, distinguishing youth with no history of victimization or perpetration, those with only one or the other, and youth with both history types; (2) utilize the resultant typology to test for differences in concurrent developmental risk factors; (3) similarly test for differences in the youths' protective factors, and thereby consider the developmental implications of joint versus distinctive profiles.

Methods

Sample and Procedures

Study participants (N = 848) were adolescents in 9th through 12th grade in urban high schools in the Northwest and Southwest regions of the United States who met established criteria for risk of school dropout (Herting, 1990): either two of the following (1) below credits for grade level, (2) top 25th percentile in school absences, (3) GPA of 2.3 or less and/or a pattern of slipping grades: or (4) prior school dropout status: or (5) standardized school referral as at-risk of school failure plus meeting at least one of criteria 1-3 above. Use of risk of school dropout/failure operationalized by these criteria results in youth samples with a constellation of risk factors/behaviors and low levels of protective factors consistent with others' research regarding the multi-problem profiles that typify youth at risk of school failure (Brener & Collins, 1998; Resnick, 2000). In addition, the criteria allow for consistent sample creation across participating schools and districts. The extent to which these recruitment strategies yield samples at higher levels for risks and lower levels for protective factors as well as elevated levels of violence exposure relative to national averages has been previously demonstrated (Eggert, Herting, & Thompson, 1996; Herting, 1990; Nurius et al., 2008).

Following IRB approved procedures, participants were randomly chosen for recruitment from the sampling pool and invited to participate; children via the school setting and parents by telephone. Information was provided about the types of questions, voluntary nature of participation and monetary compensation. Overall the participation rate across high schools was about 75%. Once a youth completed the initial questionnaire, study retention was very high, as over 87% of the youth invited to participate completed the in-depth interview. Interviews were in person, standardized, conducted by master's level clinicians, monitored for fidelity, and documented to ensure consistency. Verbal and written assent/consent was obtained from both students and parents or guardians. Approved protocols were followed with respect to minors at risk and mandatory reporting.

Within the sample, 45% were female, ages ranged from 14-21 years with only three being over age 19, and an average age of 15.98. Ethnic breakdown of the sample included 20.0% Latino/Hispanic, 15.5% African American, 9.9% Asian American/Pacific Islander, 7.2% Native American, 9.0% self-reported mixed or other ethnicity, and 38.4% were European-American.

Measurement

Data were collected using the *High School Study Questionnaire* (HSQ) and the *Measure of Adolescent Potential for Suicide* (MAPS) interview. Both the HSQ and MAPS draw from well-known scales (e.g. Rosenberg's Self-esteem Scale, the CES-D) or scales constructed specifically for this population (e.g. the Drug Involvement Scale---DISA). Both have been tested and analyzed extensively for reliability, ease of use, interpretability, and developmental appropriateness (Eggert, Thompson, and Herting, 1994; Walsh, Randell, & Eggert, 1997). All measures used a 7-point scale unless otherwise indicated. Specific measures are described below, and are summarized in Table 1.

Violence history—*Violent victimization* was assessed with five items: two witnessing (parental violence toward a family member, family member destroying things) and three directly experiencing (physical abuse, sexual abuse, and physical injury). Scale construction paralleled that of other youth surveys (the National Youth Survey, Developmental Victimization Survey) in distinguishing (1) exposure form—whether respondents have experienced one or more of the measured violence forms and (2) cumulative exposures--assessed by summing the frequency of exposure based on a 7 point scale (0 = never, 3 = sometimes, 6 = many times) across all violence forms. *Violence perpetration* was assessed through six items: physically injuring someone else, thinking about hitting someone when angry, physically or emotionally harming a member of the opposite sex, deliberately damaging someone's property, getting into fights, and getting disciplined for fighting at school ($\alpha = 0.72$). Items were rated on a 7 point scale 0 = Never, 3 = Sometimes, 6 = Many times).

Developmental Risk Factors

Emotional distress is composed of four dimensions. The *depression* inventory (16 items, $\alpha = 0.90$) screened for symptoms of depression in the last two weeks including loss of energy, difficulty sleeping, etc. *Anxiety* tapped excessive worry (about school, home, work, expectations), physical agitation, fear and frightening dream/thoughts, humiliation, and stomachaches in the last two weeks (13 items, $\alpha = 0.87$). The *hopelessness* scale (14 items, $\alpha = 0.89$) included questions about feelings of discouragement and hopelessness, lack of enjoyment in life, no viable solutions to problems. The *anger* scale included questions on inwardly directed anger (self-hate, self-blame, holding grudges), and externalized anger (losing control, fighting) (11 items, $\alpha = 0.85$).

Life stress was assessed along three dimensions: sum of stressors, impact of stressors and family distress. Based on yes/no responses to thirty-one stressful events experienced within the past two weeks, a *sum* of adolescent stressors was calculated. The *effect* of stressors was reflected in the mean of how much distress each event had caused, based on 0-6 Likert type scale (0 = not at all, 2 = a little, 4 = moderately, 6 = a great deal). *Family distress* ($\alpha = 0.59$) based on three items: conflicts and tensions with parent(s), thoughts of running away, and problematic parental alcohol and/or drug use.

Risky behavior was assessed using multiple indicators. Substance use, including *alcohol use*, was measured as the frequency of beer, wine and hard liquor use ($\alpha = 0.71$), and *other drug use* (3 items, frequency of marijuana, hard drug, and polydrug use, $\alpha = 0.71$). Other *high risk*

behaviors included trouble with the law, driving recklessly, unprotected sex, running away from home, and life-threatening risks (9 items, 0 = Never, 3 = Sometimes, 6 = Many times, α = 0.73). A mean-based scale of 8 items assessed *peer high risk behavior* related to how many friends use drugs/alcohol, skip school, fight, and get into trouble at school or with the law (α = 0.88).

Developmental Protective Factors

Personal resources were measured with three indicators. *Self-esteem*, based on four items (α = 0.78), assessed perceptions of self-worth and positive qualities, feeling useful, and taking a positive attitude toward self. A nine item *personal control* scale measured perceptions of being in control of one's life and the ability to cope and adjust (α = 0.85). The number of positive coping strategies were assessed with five items that tapped *problem solving*, the range of coping strategies used, and the level of problem-solving coping (α = 0.72).

Social support was measured along four dimensions. Total *amount of support* and level of help for school from 9 sources (family, peers, teachers), each rated using a 21-point scale ranging from −10 (nonsupportive) to 0 (neutral) to +10 (supportive). These sources were then rated as to how *available* they were (0-6; never to always). Students' *sense of support* was measured with six items concerning a sense of belonging, loneliness, and having people to turn to (α = 0.71). A five-item *family support satisfaction* scale tapped perceptions of family support, help, and communication (α = 0.89).

School engagement was measured with four scales. *School goals met* combined six items that rated students' perception of their attendance, G.P.A., performance, working towards a future career, and compliance with school rules (α = 0.85). *School satisfaction* contained four items and measured students' perceptions of their schedules, performance, attendance and the school atmosphere (α = 0.70). *Drop out risk* used a single question to probe students' likelihood of dropping out within the next year (*M* = 0.38, *SD* = 1.09). In addition, the number of times the student moved in middle (*M* = 0.68, *SD* = 1.08) and high school (*M* = 0.54, *SD* = 1.00) is used to show stability.

Demographics—Students were asked a series of questions about their family structure and socioeconomic status. In addition to parental divorce, students were asked if they lived with a single parent, one biological parent plus a stepparent, both biological parents, or other. Both maternal and paternal education and employment status were assessed, as well as how the students perceived their family status compared to others (-3 = less well off to 3 = much better off).

Results

Violence History Typology

Adolescents were distinguished as to those who reported 1) neither victimization nor perpetration histories, 2) victimization histories only, 3) perpetration histories only, and 4) both victimization and perpetration histories. The extent of violence exposure within this sample was sufficiently high that categorization based on all or nothing criteria would have classified one group with the vast majority of youth. For example, using a criterion of "one time witnessing a family member destroy something" or a criterion of "low levels of fighting" would classify the first as victimization and the second as perpetration.

We applied criteria consistent with prior investigations. Among at-risk adolescents, for instance, some degree of aggressive behavior is relatively common. Thus, to meaningfully capture levels of aggression beyond low levels, we followed Cuevas, Finkelhor, Turner, &

Ormrod (2007) in using the mean of measured perpetration to distinguish youth without any or only minor perpetration histories from those with more extensive histories. In establishing victimization classification, we considered findings that exposure to multiple forms of violence carries the greatest effects on later outcomes (Finkelhor, Ormrod, Turner, & Hamby, 2005; Nurius et al., 2008). Victimization history, therefore, was defined as exposure to two or more forms of violence or to higher levels (3 or higher on a 0-6 scale) of any one form.

The resulting typology consisted of youth with: No History (NH, $N = 270$, 32.0%), Victimization Histories (VH, $N = 191$, 22.6%), Perpetration Histories (PH, $N = 104$, 12.3%), and both Victimization and Perpetration Histories (VPH, $N = 280$, 33.1%). ANOVA tests run on the perpetration and victimization scales used to create the typology confirmed the criteria had correctly classified the sample. The NH and PH groups reported no multi-form victimization and only marginal exposure on any one form. The mean for the NH and VH groups on perpetration averaged slightly more than two compared to 9.57 and 12.22 for the PH and VPH groups, respectively. VPH youth reported significantly higher levels of perpetration than the PH youth ($F(3, 841) = 446.17$, $p < .001$) and higher levels of victimization than the VH group ($F(3, 841) = 248.50$, $p < .001$).

Demographic Characteristics

As shown in Table 2, sex was distributed unevenly, with females disproportionately represented within the VH group, and males at higher frequencies within the PH and VPH. There were no significant differences by respondent race using either a dichotomized racial categorization (racial minority or European-American) shown in Table 2 or using the full set of racial categories--Asian/Pacific Islander, African American, Caucasian, Latino, Native American, and mixed race or other ($\chi^2 = 9.83$, $p > .05$). VH and VPH youth reported greater parental divorce rates and higher single parent families contrasting PH and NH youth, about half of whom were raised by both biological parents. Groups were comparable on age, socioeconomic characteristics of parental education and employment level, but VH and VPH youth reported significantly lower family finances compared to other families they knew.

Analysis

To compare differences and similarities among groups based on risk and protective factor sets, we conducted MANCOVA tests controlling for sex. Controlling for sex allowed us to examine the relationships of violence histories to risk and protective factors, avoiding potential confounds. Wilk's Lambda was used to test the multivariate null hypothesis that there would be no difference among the groups. Following significant MANCOVA results, we used ANCOVA to examine differences among the groups on individual measures within each set. Finally, Tukey's post hoc tests were used to examine pairwise comparisons, holding the error rate constant.

Developmental Risk Factors

Robust differences for all risk factor domains were evident (Table 3) in the multivariate and univariate tests. In addition, between group comparisons revealed that the NH youth were faring significantly better across all measures, showing significantly lower developmental psychosocial risk relative to each the violence-affected groups.

With respect to life stress, VH and PH youth were comparable on elevated number of stressors and effects of stress. The PH and VPH groups were also comparable in greater family distress (e.g., serious conflict with parents and siblings) and VPH youth reported number of stressors and effects of stress exceeding both the PH and VH youth.

Risky behaviors showed consistent alignment with perpetration. The PH and VPH groups were largely comparable and were significantly higher on every measure than the VH and NH groups. VPH exceeded PH youth in reporting individual risk behaviors (e.g., put self in physical danger). With respect to emotional distress, VH and PH youth were comparable and higher than NH youth on depression, anxiety, and hopelessness. Anger stands out as associated with perpetration, and VPH were significantly higher in almost every pair-wise comparison for distress indicators.

Developmental Protective Factors

Significant MANCOVA differences were also evident across the protective factor domains of personal resources, social support and school engagement (Table 4). However, the NH youth were less uniformly distinct from violence-affected youth. Violence-affected youth reported significantly less support than the NH group on every support measure, although VH youth showed some comparability, particularly on personal resources. The VH and PH groups were comparable across all support measures. PH and VPH youth were comparably low on all protective factors except sense of support, for which VPH youth were lower.

Although all youth in this sample were at risk for school dropout, differences emerged between groups on all measures of engagement in school. VPH youth lagged behind both VH and NH youth, particularly evident in lower school goal attainment and satisfaction. VH youth also exceeded PH youth in meeting school goals and expressing school satisfaction.

Discussion

This study is one of the first to directly compare multi-level risk and protective factors associated with healthy development among adolescents with histories of neither victimization nor perpetration, victimization only, perpetration only, and those with histories of both. The rare juxtaposition of these four violence histories provides insights into their overlapping and distinct developmental patterns. The expectation that all violence-affected groups (Victimization Histories, Perpetration Histories, and Victimization and Perpetration Histories) would report elevated developmental risk and lower protective factors relative to No History youth was consistently supported. Also supported were expected findings of strong differences among the three types of violence-affected adolescents. Results suggest that both experienced and perpetrated violence must be considered simultaneously to fully understand and intervene with adolescents at risk for school dropout and increased risk for maladaptive development. These findings support theorizing beyond the acknowledged overlap of victimization and perpetration to consider distinct needs and developmental implications for youth with pathways marked by victimization and perpetration. We turn next to examination of each violence-affected group.

Victimization History Youth

Youth reporting victimization without perpetration (VH) were predominantly female. Contrasted with youth free from violence histories, this group reported greater emotional distress, risk behaviors, and life stress—reflecting a picture of heightened vulnerability and impairment that echoes other research (Donnelly & Amaya-Jackson, 2002; Wolfe, Scott, Wekerly, & Pittman, 2001). In contrast, VH youth were equivalent to the NH youth on most protective factors, and herein lies a defining dimension of VH youth. Victimized individuals who also report perpetrating violence (VPH) demonstrated higher risk and lower protective resources on every factor set and most individual measures. This suggests that the pathway between victimization and perpetration may be attenuated by protective factors in the form of social and personal resources.

Social support has been found to be an important protective buffer for the effects of victimization (e.g., Jonzon & Lindblad, 2006; Tremblay, Herbert, & Piche, 1999). Examination of support in the present study revealed an interesting pattern. VH youth reported lower support from their families, parents and siblings than NH youth; however, they reported *higher* levels and availability of support from outside sources—teachers, school counselors, and friends. This suggests that the individuals in the VH group have experienced some familial difficulties, yet have succeeded in compensating by finding external support resources that might play important roles in preventing the transition to the perpetration of violence. Additionally, VH and NH youth were equivalent in personal resource profiles (self-esteem, personal control, and problem-solving coping), yet PH youth were substantially lower on all of these indices.

Even within a sample recruited based on academic underperformance and drop-out risk, VH youth report significantly stronger ties to school than those with violent tendencies. In addition to higher satisfaction with support from teachers, VH youth report higher school satisfaction and goals met than either the PH or VPH groups. Although victimization can substantially impede school performance and participation, such as through attention and behavior problems (Kennedy & Bennett, 2006), these findings argue for school-based relationships and activities as a developmental asset to build on and enlarge. In sum, these results support theories that resilience and protection that can buffer the effects of adversity and violence (Jonzon, & Lindblad, 2006; Scarpa & Haden, 2006).

Perpetration History Youth

The PH group was dominated by males (67.3%), came from two-parent homes more than any other group, and reported family finances comparable to NH youth. In these respects, they show less social disadvantage relative to the other violence-affected groups. Although largely comparable to VH youth with respect to emotional distress and number of life stressors, PH youth diverge in their elevated family discord, anger, engagement in risky behaviors, and affiliation with riskily behaving peers. They also reported lower personal resources, school goal achievement, and school satisfaction.

Collectively, these contrasts suggest that the PH group may align with the traditional concept of delinquents. A profile of family conflict, emotional distress, disengagement, and rule breaking emerges with this group, which is not co-present with personal resources or school ties that may offer alternatives or attenuation. The distress experienced by this group is equivalent to the VH youth, evidencing the often-overlooked needs PH youth have for therapeutic intervention, a resource often not readily available through juvenile justice contacts associated with delinquency. Findings of elevated family conflict and stress within these indices reveals that PH youth are functioning within highly disregulated families (e.g., high reports of serious conflict within family, parental acceptance of student use of drugs and alcohol, low levels of family support). Research has repeatedly shown the importance of family of origin problems in predicting violence perpetration, such as parental attachment, supervision, and positive expectations (Herrenkohl et al., 2008; Resnick et al., 2004).

An additional strong risk factor for violent perpetration is association with delinquent peers (Bowman, Prelow, Weaver, & Scott, 2007; Herrenkohl et al., 2008). Our findings are consistent with this: PH and VPH youth reported substantially higher associations with risk-engaging peers who skip school, get in trouble with the law, and use drugs and alcohol than VH and NH youth. These findings are consonant with theories of social learning of violence perpetration. Social learning theory (Bandura, 1973; 1977) postulates that behavior is learned through observation or experiences; individuals who perceive a great deal of conflict and aggression from parental role models may mimic this behavior later on. Associations with negative peers—as found here—support the continuation of these behaviors.

Victimization and Perpetration Histories Youth

Similar to the PH group, VPH youth were disproportionally male. However, on other demographic factors—lower family finances and greater single parenting—they more closely resembled VH youth. VPH youth were distinguished by higher levels of risk *combined with* lower levels of protective factors—a striking contrast with the NH and VH groups. As noted previously, risky behaviors undertaken by these youth tended more toward self-destructive behavior, like driving a car recklessly or taking life-threatening risks, and less towards delinquency such as theft.

The consistent elevated levels of risk factors across all domains are congruent with other findings. In studies of violent adolescents, Flannery and colleagues (2001) and Odgers et al. (2007) found that violent females reported higher levels of emotional distress, suicide risk, affect regulation problems, violence exposure, antisocial peer and family behaviors than either matched control group or “low level” (nonviolent) juvenile offenders. Cuevas and colleagues (2007) found that individuals who met the criteria for both delinquency and victimization were faring worse than individuals who were only victims or delinquents on emotional distress and drug and alcohol use. Moreover, as with the current sample, youth with the most compromised development have much higher likelihood of suffering multiple forms of violence exposure—combinations of witnessing domestic violence, physical abuse, sexual abuse—which significantly amplifies future risk of psychopathology and repeated violence exposure (Cuevas et al., 2007; Odgers et al., 2007).

In short, perpetrating victims are particularly concerning because heightened risk for negative development outcomes combines with a cumulative burden of deficits (Schwartz et al., 2001). In addition to compromised adjustment, youth with longer dual histories of victimization and perpetration tend to occupy chronically stressful social contexts that do not offer resources for resilient coping. Contrasted to the more focused and calculated aggression of nonvictimized perpetrators, aggressive victims’ perpetration is often emotionally charged, undercontrolled, ineffectual, and self-damaging (Hanish & Guerra, 2004). Interventions for these individuals must address both sides of the equation of victimization and perpetration. The etiologies of perpetrating victims highlights the importance of preventing early violent victimization as a key to preventing future violence perpetration in adolescence and adulthood (Fang & Corso, 2007).

Traumatic stress theory suggests that victimization can create a hostile attribution bias, impaired social functioning, and increased aggression (Chemtob, Roitblat, Hamada, Carlson, & Twentyman, 1988; Hartman & Burgess, 1993). Additionally, traumatic experiences may create emotional and cognitive states that victims may seek to control by substance use and risk-taking, further increasing the chances of violence exposure or aggression (Clark, Lesnick, & Hegedus, 1997). Violence-affected youth who lack personal and social resources to buffer their stress are vulnerable to engagement in antisocial behaviors and relationships that further increase their risk of both future victimization and perpetration (Lauritsen et al., 1991, 1992). These theories seem to describe most aptly the VPH group. Victimization, poor family of origin functioning, lower personal resources, and poor support, are all reflected in the highest levels of stress, risky behaviors, emotional distress, and perpetration of violence of any group.

Limitations

The cross-sectional nature of this study precludes specific claims about causality, requiring comparison to other studies and theory to support causal interpretations. Additionally, though this sample included two large metropolitan areas, it remains geographically limited, so generalizations must be made with caution. Second, assessment of violence histories was

on a self-report basis. Although these experiences cannot be externally corroborated, a pilot study of a subsample of these individuals in young adulthood indicated satisfactory reliability (reports in adolescence were highly correlated with reports in young adulthood of violence during adolescence) and construct validity (violence exposure reported in adolescence significantly correlated with emotional distress at the time and trauma symptoms in young adulthood) (Nurius & Thompson, 2008). Additionally, the items that surveyed victimization and perpetration in this survey are not comprehensive. However the fact that the findings provide strong and interpretable trends even with limited power supports the argument for more thorough assessment in future analyses (cf. Finkelhor et al., 2005).

Implications

Despite these limitations, this study presents strong evidence of the negative developmental impacts of both violent victimization and perpetration. The findings argue for prevention efforts that attend to those who perpetrate violence as well as are victimized, that prioritize youth showing signs of problems associated with violence, and for inclusion of violence assessment in prevention programs that focus on problem behaviors such as substance use, depression, and risky behaviors. This study demonstrates that adolescent perpetrators are also distressed individuals, reinforcing suggestions that perpetrating youth have poor personal and social skills and supports to resolve conflicts and deal with stress (Lochman et al., 2003; Resnick et al., 2004). Psychosocial correlates of perpetrating behaviors highlight the need to assess whether perpetration of violence can function as a form of violence exposure, such that perpetrators of violent crime may be "'traumatized' by their own actions" (Moskovitz, 2004, p. 22).

Recent theory argues for attention to the unique developmental experiences and needs of adolescents in the design of prevention and treatment programs for victimized and perpetrating or youth at risk for perpetrating violence. Recent work on adaptive interventions that target subgroup differences may be particularly appropriate for the populations discussed here (Collins, Murphy, & Bierman, 2004). Findings from this study indicate somewhat different intervention implications for the groups. For youth who report victimization only, interventions should focus on reducing risk factors (e.g., emotional distress, life stressors) as well as the value of engaging personal and social resources, which are comparatively strong among these youth. For youth with perpetration histories, intervention implications are more complex. For both perpetration groups, social supports and personal resources are significantly lacking. This impoverishment indicates active development of these and related protective resources as a priority. This may well involve modification of school and family contexts, such as inclusion of other caring adults, reduction of family strain, and augmenting prosocial peer ties. Profiles of victimized and perpetrating youth indicate intensive interventions to curb perpetration and reduce risk of life course persistent aggressiveness (cf. Huesmann, Dubow, & Boxer, 2009), reduce risk (e.g., elevate mental health) as well as promote social and personal resources.

There are also strong implications for research on violence and trauma. Assessing victimization or perpetration separately may miss important developmental aspects of both. When examining victims of violence, outcome studies that do not assess aggressive or violent subgroups may fail to capture differential trajectories through development. Similarly, studies of perpetrators that combine individuals with and without victimization histories are likely to obscure results that could provide important insights to interrupt problem behaviors.

A unique contribution of this study to the literature on youth violence is the comparative examination of the independent and joint contributions of violent victimization and

perpetration to behaviors influencing adolescent development. Because the few studies that address both victimization and perpetration have focused primarily on younger children, this study addresses a gap in the literature by providing information about the pivotal developmental period of adolescence. Additionally, this study accesses high-risk youth through community-based sampling, which is complementary to clinical and juvenile justice sampling. In corpus, this adds to knowledge about risk and protective factors associated with both violent victimization and perpetration, and such information reflects early patterns of potential behavior problems and is especially informative for school-based intervention programming

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Table 1

Measurement Summary

	# Items	α	*M* (*SD*)		# Items	α	*M* (*SD*)
Victimization	**5**	**0.70**	**1.07 (1.01)**	**Perpetration**	**6**	**0.72**	**6.40 (6.04)**
Developmental risk factors:				**Developmental protective factors:**			
Emotional distress:				Personal resources:			
Depression	16	0.90	1.61 (1.01)	Self esteem	4	0.78	4.30 (1.32)
Anxiety	13	0.87	1.38 (0.94)	Personal control	9	0.85	4.14 (1.08)
Hopelessness	14	0.89	1.44 (0.89)	Problem-solving coping	5	0.72	3.19 (1.19)
Anger	11	0.85	1.92 (1.14)				
				Social support:			
Life stress:				Amount of support	9	N/A	5.13 (2.79)
Stressful events	31	N/A	12.01 (5.35)	Availability of support	9	N/A	4.04 (1.03)
Effects of stress	31	N/A	2.06 (1.04)	Family support satisfaction	5	0.89	3.33 (1.69)
Family distress	3	0.59	1.26 (1.21)	Sense of support	5	0.71	4.76 (0.99)
Risky behavior:				School engagement:			
Alcohol use	3	0.71	0.97 (1.19)	School goals met	6	0.85	3.70 (1.34)
Drug use	3	0.71	0.60 (0.92)	School satisfaction	4	0.70	3.12 (1.13)
High risk behaviors	9	0.73	0.83 (0.88)	Drop-out risk	1	N/A	0.39 (1.08)
Peer high risk behaviors	8	0.88	2.56 (1.53)	School moves	2	0.24[1]	1.23 (1.64)

[1]Value is Pearson's *r* coefficient.

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Table 2

Demographic characteristics by victimization/perpetration typology

	No History (NH) (N=270)	Victimization History (VH) (N=191)	Perpetration History (PH) (N=104)	Victimization & Perpetration History (VPH) (N=280)	*F*-test/ χ^2
Chi-square tests:					
Female (45.3%[1])	47.0%	59.7%	32.7%	38.9%	27.52***
Ethnic/racial minority[2] (61.6%)	63.1	62.8	51.9	64.0	5.14
Parents divorced (42.6%)	37.7	49.4	37.3	45.1	7.11
Family structure:					
Single only (34.0%)	33.7%	39.3%	22.1%	35.0%	25.09**
1 step+1biol (14.3%)	11.9	14.1	16.3	16.1	
Biological parents (39.8%)	46.7	32.5	50.0	34.3	
Other (12%)	7.8	14.1	11.5	14.6	
Mother's work:					
Full time	73.0%	71.0%	68.9%	70.6%	8.18
Part time	10.5	11.3	7.8	15.1	
Not employed	16.5	17.7	23.3	14.3	
Father's work:					
Full time	83.1%	83.9%	80.2%	77.8%	5.72
Part time	7.3	8.3	6.3	8.2	
Not employed	9.7	7.7	13.5	14.0	
ANOVAs:					
Age	16.03	16.04	15.86	15.86	1.30
Mother's education [3]	2.97	3.04	3.34	2.87	1.44
Father's education	3.53	3.51	3.47	3.30	0.69
Family finances [a, c]	0.69	0.33	0.64	0.28	4.69**

[1]Percentages in parentheses indicate the statistic for the whole sample.

[2]A more detailed analysis of ethnicity was conducted and was nonsignificant.

[3]Scale anchored by 0 = some high school and 6 = Schooling beyond college

*p<.05,

** p<.01,

*** p<.001.

Contrasts based on Tukey's HSD post-hoc test:

[a] NH significantly different from VH

[b] NH significantly different from PH

[c] NH significantly different from VPH

[d] VH significantly different from PH

[e] VH significantly different from VPH

[f] PH significantly different from VPH

Table 3

MANCOVAs of risk factors by victimization/perpetration typology controlling for sex

Risk Factors	No History (NH)(N=270)	Victimization History (VH) (N=191)	Perpetration History (PH) (N=104)	Victimization & Perpetration History (VPH) (N=280)	*F* value
Life Stress:				Wilk's Lambda (9, 2044.49)= 0.84, $F = 17.39^{***}$	
No. of stressful events *a,b,c,e,f*	9.89	12.05	11.45	14.37	38.54^{***}
Effect of stress *c, e, f*	1.93	2.00	1.98	2.24	4.78^{**}
Family distress *a, b, c, d, e*	0.89	1.15	1.46	1.63	19.81^{***}
Risky Behaviors:				Wilk's Lambda (12, 2198.91)= 0.80, $F = 16.14^{***}$	
Alcohol use *b, c, d, e*	0.67	0.81	1.27	1.24	13.94^{***}
Other drug use *a, b, c, d, e*	0.31	0.52	0.87	0.85	19.93^{***}
Own risk behaviors *a, b, c, d, e, f*	0.40	0.66	0.93	1.21	41.16^{***}
Peer risk behaviors *a, b, c, d, e*	1.89	2.28	3.26	3.12	43.71^{***}
Emotional Distress:				Wilk's Lambda (12, 2214.79)= 0.77, $F = 19.46^{***}$	
Depression *a, b, c, e, f*	1.30	1.55	1.69	1.92	19.53^{***}
Anxiety *a, b, c, e, f*	1.04	1.28	1.46	1.72	28.42^{***}
Hopelessness *a, b, c, e*	1.19	1.39	1.59	1.66	15.51^{***}
Anger *a, b, c, d, e, f*	1.31	1.69	2.15	2.59	78.94^{***}

* p<.05,

** p<.01,

*** p<.001.

Contrasts based on Tukey's HSD post-hoc test:

a NH significantly different from VH

b NH significantly different from PH

c NH significantly different from VPH

d VH significantly different from PH

e VH significantly different from VPH

^{f}PH significantly different from VPH

Table 4

MANCOVAs of protective factors by victimization/perpetration typology controlling for sex

Protective Factors	No History (NH) (N=270)	Victimization History (VH) (N=191)	Perpetration History (PH) (N=104)	Victimization and Perpetration History (VPH) (N=280)	*F* value
Personal Resources:			Wilk's Lambda (9, 2044.49)= 0.97, F = 2.84**		
Self-esteem *b, c, d*	4.50	4.39	3.90	4.17	6.54***
Personal control *b, c, d, e*	4.30	4.21	3.88	4.00	5.93***
Problem-solving coping *b, d*	3.28	3.28	2.90	3.14	3.01*
Support:			Wilk's Lambda (12, 2204.20)= 0.93, *F* = 5.28***		
Availability of support *b, c, e*	4.21	4.12	3.98	3.86	5.70***
Amount of support *b, c, e*	5.76	5.36	4.81	4.53	10.00***
Family support sat. *a, b, c*	3.82	3.28	3.08	3.02	11.90***
Sense of support *a, b, c, e, f*	5.02	4.75	4.79	4.51	13.06***
School Engagement:			Wilk's Lambda (12, 2061.33)= 0.92, *F* = 5.58***		
School goals met *b, c, d, e*	3.98	3.83	3.34	3.42	10.45***
School satisfaction *b, c, d, e*	3.35	3.28	2.87	2.86	10.89***
Drop out risk *a, c*	0.23	0.47	0.39	0.52	3.45*
School moves *a, c*	0.88	1.26	1.14	1.51	6.52***

*p<.05,

**p<.01,

***p<.001.

Contrasts based on Tukey's HSD post-hoc test:

*a*NH significantly different from VH

*b*NH significantly different from PH

*c*NH significantly different from VPH

*d*VH significantly different from PH

*e*VH significantly different from VPH

[f] PH significantly different from VPH

Table 5

Summary of key findings for study groups with violence histories

Group	Key features
Victimization history (VH)	➢Predominately female
	➢Elevated risk factors, yet lower than VPH on all, and lower than PH on many
	➢Equivalent to NH youth on almost all protective factors.
	➢Higher protective factors than PH and VPH youth in many cases.
Perpetration history (PH)	➢Predominantly male; largest proportion of two-parent homes
	➢Comparable to VH on most risk factors, but greater family discord, anger, and individual and peer risky behaviors.
	➢Lower than NH and VH youth on almost every protective factor.
Victimization & perpetration history (VPH)	➢Disproportionately male; lower family finances; comparable to VH youth in reporting more single-parent homes and fewer two-parent homes
	➢Significantly higher than NH and VH on all risk factors; lower on most protective factors
	➢Comparable to PH on protective factors, but higher on risk factors

Note: NH = No violence history