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The Effects of Promotive Factors on Exposure to Community Violence Among Urban Middle School Students

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Abstract

During adolescence, exposure to community violence (ECV) can negatively impact multiple facets of health and future achievement. Existing research mainly focuses on the risk factors that increase ECV, although multiple promotive factors are associated with lower levels of ECV. However, research has not examined the unique and combined effects of these promotive factors on ECV. The current study investigates promotive factors at the individual, peer, and supportive adult relationship levels for their unique and combined associations with ECV to determine which factors are associated with the lowest levels of ECV. 2725 adolescents from three urban middle schools ($M_{age} = 13.22$; 48% male; 90% Black, 18% Hispanic or Latino) reported measures of ECV, positive outlook, self-efficacy for nonviolence, peers' prosocial behavior, friends' support for nonviolence, presence of a caring adult, and parental support for nonviolence. Regression analyses showed that a combination of multiple promotive factors better explained the variance in ECV than any single promotive factor alone, indicating that promotive factors have compounding effects. Positive outlook, self-efficacy for nonviolence, friends' support for nonviolence, and the presence of a caring adult were all uniquely associated with lower levels of exposure to community violence across all steps of the hierarchical regression. In alignment with positive youth development theory, these results demonstrate that an adolescent's ECV risk is lower if they have more promotive factors. These findings emphasize the importance of relational promotive factors as future targets for strengths-based interventions.

Keywords: peer relationships; adult relationships; adolescence; exposure to violence



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1. Introduction: Understanding the Role of Promotive Factors in Youths' Exposure to Community Violence

Adolescence is a crucial developmental period, a time when individuals discover their identity and begin to shape their future (Brown et al., 1986). External factors can influence how an adolescent develops and, in turn, how the rest of their life unfolds. Among the most impactful of these factors is exposure to community violence (ECV), or witnessing intentional acts of violence between strangers in public areas (Motley et al., 2017). ECV may alter multiple facets of an adolescent's future. Higher rates of adolescent ECV, for example, are associated with more aggression and other risk behaviors (e.g., delinquent behavior,

substance use; Fowler et al., 2009) that can then increase their risk of involvement in future violence (Stoddard et al., 2015). Studies have also linked ECV to lower academic grades (Sonsteng-Person et al., 2023), as well as poorer mental health (Butler-Barnes et al., 2011) and physical health outcomes (Wright et al., 2016). Importantly, adolescents living in urban, high-poverty, under-resourced communities are more likely to be exposed to community violence than youths living in well-resourced areas contributing to population-level health disparities (Zimmerman & Messner, 2013). These associations can be further explained and exacerbated by systemic factors. For instance, racial and ethnic minority adolescents experience more ECV than their white counterparts when socioeconomic status is controlled, highlighting the potential impact of structural racism even early in an individual's life (O'Keefe & Sela-Amit, 1997). Similarly, urban inequality between neighborhoods leaves impoverished communities without the afterschool programs, community resources, and safe social organization that often protect adolescents from ECV (Salzinger et al., 2002). There is ample evidence demonstrating the harmful effects of ECV on adolescent development, yet gaps remain in the proposed solutions for protecting young people from ECV.

When considering potential ways to prevent ECV, it is essential to consider the unique context of early adolescence. In early adolescence, youths' primary influences shift from their parents and other trusted adults (e.g., teachers, mentors) to their peers (Brown & Bakken, 2011). This transitional period represents a prime target for intervention. Adolescents are still receptive to advice from adults, though have not settled into permanent habits and routines (e.g., long-term employment), have limited autonomy (e.g., cannot acquire a driver license), and can be swayed by peers modeling good behavior (Do & Telzer, 2024). Indeed, many effective interventions for violence prevention (Benson & Scales, 2009), academic engagement (Balfanz & Byrnes, 2019), and substance use (Gonzales et al., 2018) take place during middle school. These findings underscore the critical importance of investigating factors associated with ECV in early adolescence.

Prior research has primarily focused on risk factors for ECV rather than promotive factors (Stein et al., 2003). Whereas risk factors are associated with higher levels of ECV, promotive factors are associated with lower levels of ECV. Currently, most solutions to ECV are strengths-based interventions, which fortify an adolescent's arsenal of promotive factors to limit their violence exposure. This practice aligns with positive youth development theory, which posits that the more promotive factors a youth has, the more likely they are to develop healthily (Benson & Scales, 2009). There has been a movement in recent years to challenge the deficit-focused nature of violence prevention research (Benson & Scales, 2009). This shift has led to a greater emphasis on understanding how youths' strengths can be harnessed in interventions to prevent exposure to violence. Nevertheless, limited research has examined the relative importance of promotive factors at multiple levels of the social-ecological model, a series of interconnected bidirectional relationships between an individual and their surrounding environments that inform the individual's development (Bronfenbrenner, 1994). Several of the factors within the social-ecological model's microsystem include the individuals themselves, their peers, and the supportive adults around them. By viewing each of these promotive factors as their own level within a social-ecological framework, additional research can inform strengths-based interventions aimed at reducing ECV and its consequences.

1.1. Individual-Level Factors

While previous research on ECV often focuses on environmental and interpersonal influences, individual-level factors can also affect adolescents' susceptibility to ECV. Multiple studies have identified characteristics among youths that are associated with varying levels of violence exposure (McMahon et al., 2013; Stein et al., 2003). In a study of African American adolescents living in urban communities, having a positive outlook of one's future was linked to lower levels of ECV (So et al., 2018). Adolescents who believe in their potential to achieve their long-term goals are more likely to engage with peers, activities, and networks to facilitate their success (McCabe & Barnett, 2000). As a result, youth with a positive outlook of their future may be less likely to spend time in contexts where they may be exposed to violence (Stoddard et al., 2011). Further, several studies have found that adolescents' self-efficacy for resolving conflicts nonviolently is associated with lower levels of ECV. A study of middle school students in four states found self-efficacy for nonviolence to be associated with lower levels of ECV (Farrell et al., 2010a). Research involving students from urban elementary schools also found a link between reduced ECV and youth self-efficacy and prosocial behavior (McMahon et al., 2009, 2013). Adolescents with strong self-efficacy for nonviolence are less likely to engage with peer groups who condone aggressive behavior, thereby reducing their own risk of ECV (Farrell et al., 2022b). This association between individual-level promotive factors and lower levels of ECV represents a possible target for strengths-based interventions. However, existing research often presents individual-level factors in isolation without accounting for other promotive factors at the peer or supportive adult relationship levels.

1.2. Peer-Level Factors

As adolescence progresses, evidence suggests that the relative influence of peers begins to outweigh the influence of parents and adults (Brown & Bakken, 2011; Brown & Klute, 2006). Adolescents pursue a sense of belonging and do not want to "stick out" among their peers (Brown et al., 1986). Thus, peers can influence group norms by serving as a model for others in their friend group and exerting peer pressure that encourages adolescents to believe or behave in certain ways (Padilla-Walker & Bean, 2009). Simultaneously, adolescents tend to form friendships with peers who exhibit similar behaviors and beliefs, thereby reinforcing both positive and negative traits (Brown & Klute, 2006). Peers, therefore, play a major role in shaping adolescents' experiences.

Most research focuses on the effects of risk factors on adolescent behavior and attitudes; this includes many studies that highlight an association between peer risk factors (e.g., friends' delinquent behavior, peer support for aggressive responses to peer conflict) and higher levels of ECV (Cammack et al., 2011; Farrell et al., 2022b). This connection could be explained through an adolescent's desire to fit in; if their friends are engaging in risky behaviors, they may be more likely to spend time in unsupervised settings where violence is more likely to occur, thus increasing their risk of ECV (Farrell et al., 2022b). Although there is evidence that peer promotive factors influence adolescent development (Brown et al., 1986; Padilla-Walker & Bean, 2009), limited research has examined whether having friends who engage in prosocial behavior can decrease adolescents' risk of ECV. Positive youth development theory suggests that if an adolescent's friends are more interested in nonviolent solutions and prosocial activities, the adolescent will likely find themselves in environments that may decrease their own risk of exposure to community violence (Benson & Scales, 2009).

Both cross-sectional and longitudinal studies have shown that higher levels of peer-level promotive factors are associated with lower levels of ECV. For instance, adolescents with friends who engage in prosocial behavior are more likely to pursue non-violent

problem-solving strategies than violent ones (Farrell et al., 2017); adolescents that do not engage in violence or create violent environments are less likely to be exposed to violence (McMahon et al., 2013). One study found a correlation between friends' support for nonviolence and lower levels of witnessing violence (Coleman & Farrell, 2021). In a study that compared protective factors among adolescents with varying degrees of ECV, the group that was unexposed to ECV had higher rates of positive peers than the two exposed groups (Jain & Cohen, 2013). These peer promotive factors could serve as targets for potential ECV interventions, but additional research is warranted.

1.3. Supportive Adult Relationship-Level Factors

Although adolescents' peers become more influential in early adolescence, adults remain an important influence across development because they are more consistently involved in the lives of young people (McGue et al., 2005). Adolescents value their parents' opinions highly even as they begin to care more about their peers' opinions (Do & Telzer, 2024). When adolescents experience conflict with their peers, they seek support and advice from adults, including their parents and teachers (Brown & Bakken, 2011). The presence of a supportive adult relationship can potentially reinforce positive values, help with coping with adversity, and support emotional regulation or resilience in the face of adverse experiences like ECV.

Research has shown that higher levels of adult promotive factors are associated with lower levels of youth ECV. Several studies have found that parental support behaviors like parental monitoring, discipline, and involvement lead to decreased youth ECV (Gorman-Smith & Tolan, 1998; Matjasko et al., 2013). Another study examined promotive and protective factors among sixth grade students attending urban middle schools who teachers identified as having high levels of aggressive behavior. Parental support for nonviolence and parent-reported parental involvement were both associated with lower rates of ECV (Kramer-Kuhn & Farrell, 2016). Support from non-parental adults has also been linked to lower ECV. Teacher-related adaptive functioning, defined as how teachers rate their students' ability to adapt in the classroom, is associated with a decrease in exposure to violence (Ozer & Weinstein, 2004). Overall, supportive adult relationships appear to be associated with a lower risk of adolescent ECV.

1.4. Unique and Combined Effects of Promotive Factors on ECV

Given that individual, peer, and supportive adult relationship promotive factors can all contribute to adolescent development, it is important to evaluate their unique and combined effects on ECV. Promotive factors' influence on adolescents' ECV can be examined through the lens of positive youth development theory: promotive factors at all social-ecological levels can serve as assets that contribute to asset pile up, thus resulting in an adolescent's positive development and lower levels of ECV (Benson & Scales, 2009). Research into the area is currently lacking. Given the potential negative impacts of ECV, it is imperative to understand the relative influence of individual, peer, and supportive adult relationship promotive factors on ECV.

When comparing promotive factors at the peer versus adult levels, one study found that peer prosocial behavior and emotion regulation have a significant negative association with ECV, whereas parent prosocial behavior and emotion regulation do not have a significant association with ECV (Criss et al., 2017). However, parent-youth relationship quality had a stronger negative association with neighborhood violence than either of the peer factors (Criss et al., 2017). Although this study covered peer and parent promotive factors in depth, it only probed one individual-level risk factor: youth antisocial behavior. A more recent study investigated the impact of both risk and promotive factors on a

number of outcomes, including witnessing violence. The results showed that the presence of a caring adult, parental messages supporting nonviolence, friends' prosocial behavior, and self-efficacy for nonviolence are associated with lower levels of witnessing violence (Farrell et al., 2025). These studies support the role of individual, peer, and supportive adult relationship factors as potential promotive factors against adolescent ECV. However, these studies did not examine the relative influence of factors at each social–ecological level, underscoring the need for more investigation into the factors' relative impact.

1.5. Current Study

Based on existing research showing that individual, peer, and supportive adult relationship promotive factors in isolation lead to lower levels of ECV, we believe that an optimal combination of factors exists that can minimize an adolescent's risk of ECV. Studies that examine the impact of promotive factors remain somewhat limited, and very few examine interactions between individual, peer, and supportive adult relationship promotive factors. The purpose of this study expands on prior research by investigating the unique and combined effects of individual, peer, and supportive adult relationship promotive factors on ECV. These findings can inform which factors should be targeted through strengths-based interventions and the relative importance of factors at each social–ecological level.

This study will look at two individual-level promotive factors (positive outlook and self-efficacy for nonviolence), two peer promotive factors (friends' prosocial behavior and peer support for nonviolence), and two supportive adult relationship promotive factors (presence of a caring adult and parental support for nonviolence). In alignment with positive youth development theory and previous studies (Criss et al., 2017; Farrell et al., 2025), it is hypothesized that (1) all of the promotive factors will be associated with lower levels of ECV; (2) peer promotive factors will be associated with lower ECV at a higher level than individual-level promotive factors; and (3) supportive adult relationship promotive factors will be associated with lower ECV at a higher level than individual- and peer-level promotive factors.

2. Methods

2.1. Participants and Setting

This study used data collected as part of a broader CDC-funded study to evaluate the Olweus Bullying Prevention Program (OBPP), a youth violence prevention program that seeks to minimize bullying across all school ages (Farrell et al., 2018; Olweus & Limber, 2010). During the eight-year study period (2010–2018), OBPP was introduced to three urban public middle schools in the southeast United States using a multiple baseline design; OBPP was implemented in the first school in Year 2, the second school in Year 3, and the third school in Year 6. The schools were selected based on their high rates of truancy and location in neighborhoods with high levels of violence. According to school records, the majority of youth at each school were eligible for the federal free lunch program (74–100%).

The current study used a cross-sectional sample of 2725 middle school students who participated in the broader study. The cross-sectional sample was composed of a randomly selected subsample of one wave per participant, with an approximately equal number of participants selected from each grade of middle school. Participants had a mean age of 13.22 years. Most (90%) of the participants identified as Black, including 7% of the sample who identified as Black and another race. 18% of participants identified as Hispanic or Latino, most of whom (45%) also identified as White. Approximately half (48%) of participants identified as male.

2.2. Procedures

All procedures were approved by the university's institutional review board. Students were randomly selected from each school, with the initial participant cohort consisting of equal numbers of sixth, seventh, and eighth graders. As participants left school, new students of the same age were recruited (i.e., a new cohort of sixth graders was recruited at the beginning of each school year; seventh graders who left the school district were replaced with other seventh graders). Over an eight-year period (2010 to 2018), researchers conducted computer-assisted interviews with participants every three months (i.e., four waves per year). During each session, students completed a series of scaled measures relating to the individual, interpersonal, and environmental factors in their lives. To reduce participant fatigue and testing effects, a planned missing design was used such that each student only completed two of the four interview sessions per year. Both parental consent and student assent were obtained prior to interviews. Participants received a \$10 gift card each time they completed any portion of the survey.

2.3. Measures

2.3.1. Exposure to Community Violence

Exposure to community violence was assessed using the 13-item witnessing scale from an adapted version of The Survey of Children's Exposure to Community Violence (Richters & Martinez, 1993). Youth rated each item (e.g., "Heard the sound of gunfire outside when you were in or near your home?"; "Seen someone else being slapped, punched, or hit by someone?") on a six-point frequency scale ranging from 0 (*Never*) to 6 (*20 or more times*). Several research groups have noted this scale demonstrates internal consistency and reliability between tests (Selner-O'Hagan et al., 1998; Suglia et al., 2008; Thomson et al., 2002). The scale demonstrated adequate reliability in the study sample ($\alpha = 0.85$).

2.3.2. Individual-Level Promotive Factors

The six-item positive outlook subscale from the Individual Protective Factors Index (Springer & Phillips, 1997) measured participants' positive future orientation. Participants were asked to rate the veracity of different statements about their future (e.g., "I think I can have a nice house when I grow up") on a four-point scale, ranging from 1 (*YES!*) to 4 (*NO!*). Four items asking about perceptions of negative future outcomes were reverse-scored. The seven-item Self-Efficacy for Nonviolence Scale (Miller-Johnson et al., 2004) measured adolescents' self-efficacy for nonviolence. Students were asked how confident they were in their ability to employ nonviolent responses on a five-point scale, ranging from 1 (*Very confident*) to 5 (*Not at all confident*). For each scale, scores were calculated as the average rating across items. Both scales demonstrated strong internal consistency in previous studies, as well as divergent validity with self-reported frequency of physical aggression (Coleman et al., 2024; Farrell et al., 2010a; Farrell et al., 2022a). These scales demonstrated adequate reliability in the study sample (α s = 0.77–0.90).

2.3.3. Peer-Level Promotive Factors

Adolescents' perceptions of their friends' support for nonviolent approaches to conflict resolution were measured with a six-item subscale from the Friends' Reaction to Responses to Conflict Situations Scale (Farrell et al., 2017). Each item posed a hypothetical problem situation followed by a nonviolent response. Respondents were asked whether they thought their friends would have a negative, neutral, or positive reaction to that response (coded as -1 , 0 , and 1 , respectively). The friends' prosocial behavior subscale from the Friends' Behavior Scale (Farrell et al., 2017) asked participants to indicate how many of their close friends engaged in prosocial behaviors in the past 3 months (e.g., "helped out

around the house,” “said nice things or complimented people just to be nice”). Scores for each scale represented the average rating across items. In previous studies, both scales demonstrated measurement invariance by grade and gender and strong correlations in the expected direction with self- and teacher-reported problem and prosocial behaviors (Coleman & Farrell, 2021; Farrell et al., 2017). The peer support for nonviolence and friends’ prosocial behavior scales demonstrated adequate reliability in the study sample (α s = 0.78 and 0.85, respectively).

2.3.4. Supportive Adult Relationship-Level Promotive Factors

Adolescents’ perceptions of parental support for nonviolent responses to peer conflict were assessed with a five-item subscale from the Parental Messages About Fighting and Nonviolence Scale (Farrell et al., 2010b). Each item asked participants to rate how likely their parents would be to recommend a nonviolent approach to conflict resolution (e.g., “If someone wants you to fight, just tell them you don’t want to”) on a four-point scale ranging from 1 (*Very unlikely*) to 4 (*Very likely*). The nine-item Presence of Caring—Individual Protective Factors Index (Springer & Phillips, 1997) measured the degree to which participants perceived they had a caring adult figure in their life. Each item referred to “an adult” or “a special person” in the student’s life rather than a specific title or identity (e.g., guardian, teacher, grandparent). Students were asked if they believed they had access to different adult support systems using a four-point scale from 1 (*YES!*) to 4 (*NO!*). Each scale score reflected the mean rating of its items. These scales demonstrated validity through divergent validity with self-reported measures of physical aggression, internal consistency, and test-retest reliability in previous research (Cardozo et al., 2022; Coleman et al., 2024; Farrell et al., 2022a). These scales demonstrated adequate reliability in the study sample (α s = 0.78–0.89).

2.4. Data Analysis

Analyses were conducted with Mplus Version 8.10 (Muthén & Muthén, 2017). In all analyses, continuous variables were standardized to facilitate interpretation. Maximum likelihood estimation with robust standard errors was used to address missing data and account for non-normality. Regression analyses examined relations between each potential promotive factor and ECV after accounting for the effects of covariates. Covariates were sex, grade, and project year. Sex and grade were dummy-coded, with female adolescents and 6th grade students as the reference group, respectively. Project year was included as a covariate because it reflects both intervention status and cohort, as the intervention was implemented in each school in different project years and a new cohort was added each year. Multivariate regression analysis was used to examine the unique and combined effects of variables at each social–ecological level, including the covariates alone (model 1); covariates and individual-, peer-, or supportive adult relationship-level variables (models 2–4); covariates and individual- and peer-level variables (model 5); covariates and individual- and supportive adult relationship-level variables (model 6); covariates and peer- and supportive adult relationship-level variables (model 7); and covariates, individual-, peer-, and supportive adult relationship-level variables (model 8).

3. Results

3.1. Descriptive Statistics

Descriptive statistics for study variables and correlations are reported in Table 1. As hypothesized, all six promotive factors are significantly correlated with lower levels of ECV. All promotive factors were positively correlated with one another. Friends’ prosocial

behavior was not included in subsequent analyses given that it had a small ($r = -0.06$) correlation with ECV.

Table 1. Descriptive statistics and correlations for study variables.

	1	2	3	4	5	6	7
1. Exposure to community violence	-						
2. Positive outlook	-0.18 ***	-					
3. Self-efficacy for nonviolence	-0.10 ***	0.07 **	-				
4. Friends' support for nonviolence	-0.17 ***	0.16 ***	0.30 ***	-			
5. Friends' prosocial behavior	-0.06 **	0.31 ***	0.13 ***	0.36 ***	-		
6. Parents' support for nonviolence	-0.14 ***	0.29 ***	0.22 ***	0.34 ***	0.43 ***	-	
7. Presence of a caring adult	-0.18 ***	0.46 ***	0.09 ***	0.23 ***	0.39 ***	0.37 ***	-
Mean	1.58	20.36	3.98	0.24	2.34	2.68	28.88
Standard Deviation	0.65	3.74	0.99	0.58	0.82	0.99	4.93

** $p < 0.01$, *** $p < 0.001$.

3.2. Regression Analyses

First, the relation between each promotive factor and ECV was tested in a separate model that accounted for the effects of covariates on ECV. The results are reported in Table 2. All of the independent variables were significantly associated with lower levels of ECV above and beyond the effects of the covariates.

Table 2. Results of bivariate regression analyses ^a.

	<i>b</i>	<i>SE</i>	<i>R</i> ²
Positive outlook	-0.18 ***	0.02	0.05 ***
Self-efficacy for nonviolence	-0.11 ***	0.02	0.02 ***
Friends' support for nonviolence	-0.17 ***	0.02	0.04 ***
Friends' prosocial behavior	-0.05 *	0.02	0.02 **
Parents' support for nonviolence	-0.14 ***	0.02	0.03 ***
Presence of a caring adult	-0.19 ***	0.02	0.05 ***

Note. *SE* = Standard Error. ^a All regression models accounted for the effects of sex, grade, and project year.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Next, regression analyses tested the unique and combined effects of covariates, individual-level variables, peer-level variables, and supportive adult relationship-level variables on adolescent ECV (see Table 3). In Model 1 (covariates only), the covariates alone explained 1% of the variance in ECV. Male sex was associated with higher levels of ECV. Seventh and eighth grade students had lower levels of ECV than sixth grade students. Cohorts who participated later in the study (e.g., when more schools were receiving the intervention) exhibited lower levels of ECV. In Model 2 (individual factors), 6% percent of the variance in ECV was explained, a significantly higher explanation of variance than from the covariates alone. Higher levels of positive outlook and self-efficacy for nonviolence were associated with lower levels of ECV above and beyond the effects of covariates. In Model 3 (peer factors), 4% percent of the variance in ECV was explained, which is a significantly greater proportion than Model 1 (covariates only). Higher levels of friends' support for nonviolence were associated with lower levels of ECV. Model 4 (supportive adult relationship factors) explained 5% percent of the variance in ECV and again this was a significantly greater proportion than the variance explained by covariates alone. Higher levels of parents' support for nonviolence and the presence of a caring adult were associated with lower levels of ECV.

Table 3. Individual, peer, and supportive adult relationship factors associated with ECV among adolescents.

	<i>b</i>	SE	<i>R</i> ²
Model 1—Demographic covariates			0.01 **
Male sex	0.17 ***	0.04	
Project year	−0.02 **	0.01	
Grade 7	−0.12 *	0.05	
Grade 8	−0.12 *	0.05	
Model 2—Individual factors			0.06 ***
Male sex	0.17 ***	0.04	
Project year	−0.03 ***	0.01	
Grade 7	−0.13 **	0.05	
Grade 8	−0.15 **	0.05	
Positive outlook	−0.18 ***	0.02	
Self-efficacy for nonviolence	−0.10 ***	0.02	
Model 3—Peer factors			0.04 ***
Male sex	0.12 **	0.04	
Project year	−0.02 *	0.01	
Grade 7	−0.11 *	0.05	
Grade 8	−0.14 **	0.05	
Friends' support for nonviolence	−0.17 ***	0.02	
Model 4—Supportive adult relationship factors			0.05 ***
Male sex	0.14 **	0.04	
Project year	−0.02 *	0.01	
Grade 7	−0.13 **	0.05	
Grade 8	−0.12 *	0.05	
Parents' support for nonviolence	−0.07 **	0.02	
Presence of a caring adult	−0.16 ***	0.02	
Model 5—Individual and peer factors			0.07 ***
Male sex	0.13 **	0.04	
Project year	−0.03 ***	0.01	
Grade 7	−0.12 **	0.05	
Grade 8	−0.15 **	0.05	
Positive outlook	−0.16 ***	0.02	
Self-efficacy for nonviolence	−0.06 **	0.02	
Friends' support for nonviolence	−0.12 ***	0.02	
Model 6—Individual and supportive adult relationship factors			0.07 ***
Male sex	0.14 ***	0.04	
Project year	−0.04 ***	0.01	
Grade 7	−0.14 **	0.05	
Grade 8	−0.17 ***	0.05	
Positive outlook	−0.12 ***	0.03	
Self-efficacy for nonviolence	−0.08 ***	0.02	
Parents' support for nonviolence	−0.05 *	0.02	
Presence of a caring adult	−0.11 ***	0.02	
Model 7—Peer and supportive adult relationship factors			0.06 ***
Male sex	0.05 *	0.02	
Project year	−0.06 **	0.02	
Grade 7	−0.06 **	0.02	
Grade 8	−0.08 **	0.02	
Friends' support for nonviolence	−0.11 ***	0.02	
Parents' support for nonviolence	−0.05	0.02	
Presence of a caring adult	−0.15 ***	0.02	

Table 3. Cont.

	<i>b</i>	SE	<i>R</i> ²
Model 8—Individual, peer, and supportive adult relationship factors			0.08 ***
Male sex	0.11 **	0.04	
Project year	−0.03 ***	0.01	
Grade 7	−0.13 **	0.05	
Grade 8	−0.17 ***	0.05	
Positive outlook	−0.11 ***	0.03	
Self-efficacy for nonviolence	−0.06 **	0.02	
Friends' support for nonviolence	−0.09 ***	0.02	
Parents' support for nonviolence	−0.03	0.02	
Presence of a caring adult	−0.10 ***	0.02	

Note. SE = Standard Error. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Consistent with a model-building approach, regression models then tested the combined effects of individual and peer factors (model 5), individual and supportive adult relationship factors (model 6), and peer and supportive adult relationship factors (model 7; see Table 3). In model 5, individual- and peer-level promotive factors explained 8% of the variance in ECV and were uniquely associated with lower levels of ECV, confirming one of the hypotheses. Model 6 explained 7% of the variance in ECV. Within this model, the individual- and supportive adult relationship-level promotive factors were uniquely associated with lower levels of ECV. In model 7, supportive adult relationship- and peer-level factors explained 7% of the variance in ECV. Friends' support for nonviolence and presence of a caring adult remained uniquely associated with lower levels of ECV as in prior models. Notably, parents' support for nonviolence was not significantly associated with ECV after accounting for friends' support for nonviolence.

Finally, a model that included covariates, individual-level, peer-level, and supportive adult relationship-level promotive factors (Model 8) explained a significant proportion of the variance in ECV (8%). Individual-level promotive factors, friends' support for nonviolence, and presence of a caring adult were uniquely associated with lower levels of ECV. However, parents' support for nonviolence was not associated with ECV. These results partially support the hypothesis that supportive adult relationship-level promotive factors will be associated with lower ECV above and beyond individual- and peer-level promotive factors.

4. Discussion

Existing research indicates that, in isolation, adolescents' individual-, peer-, and supportive adult relationship-level promotive factors are all associated with lower levels of ECV (Farrell et al., 2025; Coleman & Farrell, 2021; Coleman et al., 2024). Some studies have compared the relative effect of different promotive factors on ECV (e.g., Criss et al., 2017; Farrell et al., 2025) or exclusively exposure to community firearm violence (e.g., Walsh et al., 2025), but they did not probe the compounding effects of these factors in conjunction with one another. Recent work using the same sample showed that youth with stronger future orientation and greater confidence in nonviolent problem-solving experienced lower levels of firearm-related community violence exposure (Walsh et al., 2025). These findings mirror the individual-level promotive factors identified in the present study and help explain why positive outlook and self-efficacy for nonviolence were especially robust predictors of lower ECV. By specifying the cumulative effect of positive factors on ECV, the results of the current study can offer multiple mechanisms for strengths-based interventions to minimize adolescent ECV. The current study addressed these gaps by examining the relative influence of promotive factors at multiple levels of the social-ecological model on

ECV in a predominantly Black sample of early adolescents living in urban communities with high rates of violence. Our analysis builds on previous literature, strengthens our understanding of what limits adolescent ECV, and suggests how we can adapt intervention strategies to maximize impact.

The findings of the current study demonstrate that promotive factors at the individual (i.e., positive outlook and self-efficacy for nonviolence), peer (i.e., friends' support for nonviolence), and supportive adult relationship (i.e., the presence of a caring adult) levels were uniquely associated with lower levels of ECV. The more promotive factors an adolescent has, the lower their risk of ECV. This finding supports our hypothesis and aligns with positive youth development theory, which suggests that an adolescent's assets can accumulate and ensure they develop in a healthy way; the number of assets—in this case, the more promotive factors—an adolescent has is correlated with the quality of their development. (Benson & Scales, 2009)

Interestingly, the promotive factors had varying levels of impact. The individual-level factors of positive outlook and self-efficacy for nonviolence were consistently associated with lower levels of ECV across models, especially positive outlook. These findings support previous studies that have shown positive outlook and self-efficacy for nonviolence to be associated with better outcomes (Farrell et al., 2022a; McCabe & Barnett, 2000; Stoddard et al., 2011). As suggested in previous studies, an adolescent who cares about their future may be more likely to find themselves in environments that allow them to succeed, thereby steering them away from contexts where violence may be more likely to occur. These results are in alignment with the context pileup hypothesis within positive youth development theory, which suggests that interacting with multiple supportive environments allows adolescents to develop in a healthy manner (Benson & Scales, 2009). While many existing studies compare the peer- and supportive adult relationship-level factors that are promotive against ECV, few include individual-level factors in their analysis. This pattern, paired with the significant impact of positive outlook and self-efficacy for nonviolence seen in our results, suggests that prior research may have undervalued the importance of individual-level factors. This research gap may translate into an opportunity for future interventions against ECV, as interventions that bolster positive outlook or self-efficacy for nonviolence would likely be more effective than those that focus on peer- or supportive adult relationship-level factors alone.

Parental support for nonviolence was not associated with ECV after accounting for friends' support for nonviolence. One possible explanation for this is the relative influence of peers throughout adolescence. While adolescents still value relationships with adults (as evidenced by the significant contribution of the presence of a caring adult in the final model), their peers become their primary source of messaging regarding behavioral expectations. Prior research supports the idea that peer influence increases throughout adolescence (Brown & Bakken, 2011; Brown & Klute, 2006), but that adults are still important support systems for adolescents (Do & Telzer, 2024). The findings of our study are in alignment with previous research and suggest that effective messaging-based interventions should focus on adolescents' relationships with their peers rather than adults. The importance of a caring adult relative to parental messages about nonviolence also underscores the critical importance of connections with caring adults. If an adolescent does not have parents or caregivers who support nonviolence, they can still receive promotive support from other caring adults such as older students, mentors, and teachers who can contribute to a lower risk of ECV. In other words, caring adults within the adolescent's community can serve as an asset in alignment with positive youth development theory, even, and perhaps especially, in those adolescents who lack a parental figure (Benson & Scales, 2009).

5. Limitations

While our findings are significant and noteworthy, they are not without limitations. Our sample represents a specific population, urban middle schoolers, most of whom identify as Black, living in areas with concentrated poverty and violence, and therefore may not be generalizable to all adolescents. However, our sample is large and reflects the demographics of those at the highest risk for experiencing community violence. These characteristics suggest the effects we witnessed are both robust and highly relevant. Though our findings demonstrate clear correlations between promotive factors and lower levels of ECV, they are derived from cross-sectional data and do not dictate a cause-and-effect relationship between variables. Future studies may introduce longitudinal analyses to establish a causal relationship between promotive factors and reduced ECV. Lastly, there are likely other covariates that contribute to adolescent ECV not accounted for in our current study. These include the multitude of systemic factors that determine an individual's life experience, such as structural and environmental racism, community segregation, and gender inequality. Additional noteworthy promotive and risk factors may appear in future research.

6. Conclusions

This study provides important insights into the promotive factors that may be associated with less adolescent ECV. In alignment with positive youth development theory, findings highlight the protective value of promotive factors across multiple ecological levels: individual, peer, and supportive adult relationships. Specifically, adolescents with a stronger future orientation, greater self-efficacy for nonviolence, friends who support nonviolent conflict resolution, and a caring adult in their life reported significantly lower levels of ECV. These findings suggest a cumulative or “pile-up” effect, whereby the presence of multiple promotive factors compounds and may offer greater protection against community violence exposure.

These findings reinforce the value of strengths-based, multi-level prevention strategies. Programs designed to reduce youth violence should simultaneously strengthen internal assets, foster prosocial peer networks, and connect adolescents with caring adult mentors. Interventions such as Youth Empowerment Solutions for Positive Futures (YES-PF), which enhance promotive factors across social–ecological domains, may be particularly effective in mitigating ECV among youth living in high-risk urban environments (Stoddard et al., 2020). Moreover, hospital-based violence intervention programs such as Bridging the Gap may reduce young people's exposure to violence (Aboutanos et al., 2011) by enhancing promotive factors (Aboutanos et al., 2024). Future research should use longitudinal designs to clarify causal pathways and track the development of promotive factors over time.

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