You Do What You See: How Witnessing Physical Violence Is Linked to Violent Behavior Among Male African American Adolescents

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Abstract
African American boys are more likely than same-aged counterparts to live in disadvantaged neighborhoods characterized by exposure to physical violence, lower socioeconomic status, poor parent education, and acts of violence. The current study used structural equation modeling to test the associations between witnessing violence, peer and parent expectations, peer behaviors, self-efficacy to avoid violence, and violent behavior as the outcome. Results suggest that African American boys who witnessed physical violence are more likely to engage in violence themselves. Peer and parent violence expectations, peer violence, and adolescent’s self-efficacy to avoid violence mediate this. These findings suggest potential for prevention of violent behaviors through modification of norms of male African American adolescents at risk for witnessing violence in their daily life.

Keywords
violence, African American, adolescent, male, self-efficacy, positive psychology, norms

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Physical violence witnessed by adolescents includes physical assaults and assaults with injury, use of weapons, sexual victimization and harassment, property victimization (e.g., vandalism and robbery), and witnessing violent acts, including shootings (Finkelhor, Turner, Ormrod, & Hamby, 2009), and negative interactions with the police. Statistics from a 2010 nationally representative sample of 4,500 adolescents aged 17 years and younger (National Survey of Children’s Exposure to Violence) found that 61% were victims or witnesses to physical violence in the previous year (Sickmund & Puzzanchera, 2014). Boys were more likely to experience assaults whereas girls were more likely to be sexually victimized, and Blacks were more than twice as likely to experience multiple forms of violence compared with adolescents of any race (Sickmund & Puzzanchera, 2014). The Centers for Disease Control and Prevention’s (CDC) Youth Risk Behavior Survey (YRBS), a monitor of health risk behaviors among 15,425 ninth to 12th graders, reported that in 2011 about 33% of youth were in physical fights and one in 25 were seriously injured in fights (Centers for Disease Control and Prevention, 2011; Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2010). Recent incidents in Ferguson Missouri, and across the United States, suggest that violent and often deadly interactions between police and African Americans are also a significant risk faced by youth in disadvantaged neighborhoods (Gabrielson, Jones, & Sagara, 2014; Rosich, 2007).

Differences in youth exposure to violence may, in part, be explained by residence and level of exposure to concomitant social and economic status of the families of these youth (Hawkins et al., 2000). In fact, African American boys living in high-risk neighborhoods are more exposed to the kinds of social and economic factors that are associated with greater opportunity to witness physical violence and to repeat these behaviors whether as a response to victimization or as a way to avert victimization (Cassidy & Stevenson, 2005). This study addresses African American boys’ heightened risk of experiencing physical violence as victim and or perpetrator. Our goal in this article is to better understand how individual characteristics and multiple social influences (i.e., peers, parents) contribute to the link between witnessing physical violence and violent behavior for African American boys. This may inform efforts at supporting African American youth who have experienced, directly and indirectly, community violence including experiences similar to episodes like Ferguson.

**Risk and Protective Factors for Youth Violence**

Youth violence is influenced by multiple risk factors such as witnessing, being a victim of violence, and peers’ expectations of violence. There are also multiple protective factors such as family influences, and individual strengths like self-efficacy to avoid violence (Farrington & Ttofi, 2011; Loeb, Farrington, Stouthamer-Loeber, & White, 2008). The literature has implicated peers in the development of both youth deviant and prosocial behaviors (Loeb et al., 2008; Lösel & Farrington, 2012). However, while adolescence is marked by increased peer influence, parents still have an important role to play in adolescents’ prosocial decision making and in protecting them from negative outcomes. In addition, self-efficacy to avoid violence is an individual protective factor
known to reduce the likelihood of negative outcomes (Jagers, Morgan-Lopez, Howard, Browne, & Flay, 2007; Riner & Saywell, 2002) such as violent behaviors. Self-efficacy represents the individual’s beliefs about their ability to make positive choices in specific situations (Bennett & Fraser, 2000). Eccles, Wigfield, and Schiefele (1998) proposed that the individuals’ own expectations for success and not just their outcome expectations are enshrined in the concept of self-efficacy. Violence self-efficacy therefore includes confidence in one’s ability to avoid engaging in violence (McMahon et al., 2013), as well as the related expectation of success.

We use the protective factor model of the risk and resilience framework (Fergus & Zimmerman, 2005) to examine the influence of witnessing physical violence, peer and parent expectations about violence, peer violent behaviors, and self-efficacy on adolescents’ violent behaviors. This framework proposes that the presence of specific strengths or protective factors (e.g., self-efficacy, positive parent expectations) may lead to positive outcomes even in the face of risks (i.e., witnessing physical violence). The protective factor model holds that assets and resources (e.g., self-efficacy to avoid violence) reduce the influence of risk factors on negative outcomes. Based on the risk and resilience framework, individuals in high-risk contexts benefit from the availability of protective factors. The risk and resilience framework helps us study how protective factors help youth overcome risk factors and resist deleterious outcomes (Fergus & Zimmerman, 2005; Zimmerman et al., 2013).

The literature holds that adolescents’ experiences with physical violence, whether as victim or a witness, are strongly associated with violent behavior (Calvete & Orue, 2011; Lindstrom Johnson, Finigan, Bradshaw, Haynie, & Cheng, 2011). Furthermore, in a study of 167 African American youth from sixth to eighth grade, Richards and colleagues (2004) found that adolescents who spent more unmonitored time with deviant peers were at greater risk of witnessing or becoming victims of violence, and that the amount of time spent in these risk contexts mediated the link between violence exposure and delinquent activity. We propose that witnessing physical violence influences adolescents’ beliefs about peer violence. Peers’ and parents’ behaviors and expectations are factors that affect adolescents’ self-efficacy to avoid physical violence, which in turn is related to violent behavior (Lindstrom Johnson et al., 2011; Robinson, Paxton, & Jonen, 2011). The current study proposes that for African American adolescent males, witnessing physical violence may not manifest as committing violence given the mediating role of peer and parent expectations and adolescent self-efficacy to avoid violence.

**Witnessed Physical Violence**

Youth’s exposure to physical violence includes observing or hearing about actual violence in their homes, schools, or neighborhoods (Kliewer et al., 2004). Among urban youth, 50% to 100% report witnessing violence in their community (Buka, Stichick, Birdthistle, & Earls, 2010; Stein, Jaycox, Kataoka, Rhodes, & Vestal, 2003), with African American boys at higher risk for witnessing violence than any other racial or gender group (Assari, Smith, Caldwell, & Zimmerman, 2015; Neumann, Barker, Koot, & Maughan, 2010). Youth from lower socioeconomic status (SES) families are
more likely to reside in poorer, urban neighborhoods characterized by higher crime levels (Neumann et al., 2010). This translates to increased exposure to violent experiences even as perpetrators. In fact, in a meta-analysis, Hawkins and colleagues (2000) found that family SES at 6 to 11 and 12 to 25 years of age was a strong predictor (though not the only predictor) of serious and violent delinquency, and that this was strongest for 6 to 11 year olds.

**Peer Influences**

Some literature has shown that peer influences may mediate the effect of protective factors on adolescent behavioral outcomes. In fact, an Aban Aya Youth Project (AAYP) study demonstrated that peer influence mediated the positive effect of the intervention on youth violence (Ngwe, Liu, Flay, & Segawa, 2004). Previous research has established a relationship between deviant peer norms and behaviors like juvenile delinquency, substance abuse, and violence (e.g., Laird, Jordan, Dodge, Pettit, & Bates, 2001; Vitaro, Brendgen, & Tremblay, 2002). In particular, association with deviant peers is linked to violent behaviors for adolescent males (Copeland-Linder et al., 2007; Lambert, Ialongo, Boyd, & Cooley, 2005). In fact, while youth violence is generally associated with peer rejection, some youth are rewarded socially (e.g., popularity) for acting out peer-endorsed violent norms (Farrell et al., 2010; Prinstein & Cillessen, 2003). In a study of 503 adolescent boys, Pardini, Loeber, Farrington, and Stouthamer-Loeber (2012) found that high peer deviance was associated with youth violence at age 13 to 14 years, whereas low peer deviance was a protective factor at 15 to 18 years old. They reasoned that certain constructs like deviant peer expectations might function as a risk for violence and a protection against future violence. Adolescents who supported non-violence engaged in fewer violent behaviors at ages 13 to 14 (Pardini et al., 2012). The current study addresses this issue specifically for African American boys. It probes paths through which peer violent behavior and peers’ violence expectations are related to violent behavior for boys who have witnessed physical violence.

There is need to study whether peer violent behavior influences adolescents’ efficacy to avoid violent behaviors, and whether this link may be linked to peers’ violence expectations (Foney & Cunningham, 2002; Salzinger, Ng-Mak, Feldman, Kam, & Rosario, 2006). Farrell and colleagues (2010) conducted a qualitative study of 106 African American adolescents and found that peers exerted a strong influence on decisions to engage in or to avoid violence. These researchers also found that concern about status and reputation among their peers made adolescents more susceptible to the influence of peers’ expectations and behaviors. Adolescents whose social environments have presented violence as an acceptable and successful means of gaining status among their peers (i.e., belief in peer expectation of violence) were less likely to avoid violence.

Adolescents often overestimate the extent of peers’ negative behaviors and expectations, and adolescents’ own behaviors are reflective of their skewed perception of the behaviors and expectations of their peers (Dishion & Owen, 2002; Prinstein & Wang, 2005). This misperception, pluralistic ignorance, results in a suppression of healthy
attitudes and behaviors in favor of unhealthy ones that are perceived to be normal (Berkowitz, 2004; Miller & McFarland, 1991). Even after controlling for adolescents’ own violent tendencies, Salzinger and colleagues (2006) found that peers’ violent norms or expectations were significant predictors of multiple negative outcomes, including witnessing, being a victim, and engaging in physical violence. This link has been found to be even more significant for adolescent males (Lambert et al., 2005).

**Parents’ Non-Violent Expectations**

Parental expectations may reduce adolescents’ engagement in violent behaviors (Brody, Kogan, Chen, & Murry, 2008) even in the face of peer influences. This protective role may function directly through parent messages about violence or indirectly through adolescents’ beliefs about parents’ expectations (Lindstrom Johnson et al., 2011). Parents in disadvantaged neighborhoods often compliment their protective parenting messages with messages reflective of the “code of the street”—an emphasis on maintaining the respect of others through the use of violence, toughness, and exacting retribution when perceived disrespect has occurred (Stewart & Simons, 2006; Wilkinson, 2003).

In a study of 168 African American parent–child dyads, Copeland-Linder et al. (2007) found that adolescents who believed that their parents support violence or who may have received messages reflective of the code of the street are more likely to engage in violence. For boys, this link was further solidified if they affiliated with deviant peers (Copeland-Linder et al., 2007). On the other hand, youth who believed their parents disapproved of violence as a problem-solving strategy may also hold non-supportive attitudes toward violence (Ohene, Ireland, McNeely, & Borowsky, 2006). Parents can protect their children by encouraging and communicating non-violence expectations. Adolescents’ belief in parent non-violent expectations and norms was more predictive of youth violence than family structure, the parent–child relationship, or parental monitoring (Orpinas, Murray, & Kelder, 1999). Several studies have found that youth perceptions of their parents’ expectations and attitudes toward violence are more predictive of youth violence than explicitly stated parent norms (Ohene et al., 2006; Sieving, McNeely, & Blum, 2000). Perceived parental expectations, however, may protect adolescents against violent behaviors (Ohene et al., 2006). This highlights the critical role of parents’ norms and subsequent messages in protecting youth.

**Individual Factors**

Self-efficacy refers to the individual’s beliefs about their ability to make positive choices in specific situations (Bennett & Fraser, 2000). While studies with European American youth have found that violence-avoidance self-efficacy beliefs influence pro-social and antisocial behaviors (Caprara, Regalia, & Bandura, 2002) fewer studies have explored this link for African American populations. Even fewer have explored this link in African American boys. The limited extant literature identifies self-efficacy to avoid violence as another protective factor associated with less violence among adolescents.
(Jagers et al., 2007). Jagers and colleagues (2007) reported that for African American adolescents, self-efficacy beliefs were a negative predictor of violent behavior.

Adolescents who considered violence as an acceptable and successful means of gaining status among their peers were less likely to avoid violence. Farrell et al. (2010) showed that peer support, peer pressure, and concern about image were related to youth violence. Together, these peer influences reduced adolescents’ confidence in their ability to avoid violent engagements (self-efficacy to avoid violence). Youth who share the “code of the streets” may have higher expectations of peer support for violence (Stewart & Simons, 2006). Peers may communicate support for violence through their promise to aid peers during a violent act, through taunting, and other verbalizations that directly encouraged youth to engage in violence (Farrell et al., 2010). However, youth cited this as a main barrier to self-efficacy to avoid violence. Youth whose friends encourage or directly support violence, and those who perceive violence as a means of saving face or establishing status, may be less confident in their ability to avoid violence. Conversely, they may think of this peer support as part of a mutual support system that provides an additional layer of protection in high-risk neighborhoods (Stewart & Simons, 2006).

Exposure to physical violence in the neighborhood and normative beliefs about violence predict use of violence in resolving social conflicts (Lindstrom Johnson et al., 2011; Lösel & Farrington, 2012; Robinson et al., 2011). Robinson and colleagues (2011) investigated how exposure to violence, normative beliefs about aggression, and depressive symptoms predicted adolescents’ use of an aggressive response style to conflict. This study of 80 African American adolescent males suggested that cognitions functioned as a pathway through which violent experiences may affect adolescents’ coping skills and behaviors. For African American boys in high-risk neighborhoods, these findings suggest that adjusting adolescents’ expectations and beliefs about violence may strengthen their self-efficacy to avoid violence, and reduce the likelihood of violent behaviors.

**The Current Study**

Incidents like the police killings of Mike Brown, Tamir Rice, and Eric Garner substantiate an increased risk for witnessing violence for African American males. This growing trend may be even more potent for youth as the violence is perpetrated by an agency that is supposed to be inherently protective—the police, and also because youth exposure is continuous as each incident is carried across various forms of media. Against this backdrop, our goal in this study is to test whether multiple social influences (i.e., peers, parents) and individual characteristics (self-efficacy) mediate the association between witnessing physical violence and acts of violent behavior among African American boys.

The following five hypotheses were tested:

**Hypothesis 1:** Witnessing physical violence is positively associated with violent behavior directly.
Hypothesis 2: The association between witnessing physical violence and violent behavior is mediated by self-efficacy to avoid violence.

Hypothesis 3: Peer violence mediates the link between witnessing physical violence and peers’ expectations.

Hypothesis 4: Serial mediation exists such that witnessing physical violence functions through peer violent behavior, and peers’ expectations of violence and self-efficacy to avoid violence to influence violent behavior.

Hypothesis 5: Self-efficacy mediates the relationship between parent expectations and youth’s violent behaviors.

Method

Procedure

The current study used data from the AAYP, a community study with a total of 1,153 participants. Participating schools had enrollments greater than 500 students with 80% African American and less than 10% Latino or Hispanic; Grades K through eighth; not on probation or slated for reorganization; and not a special designated school (e.g., magnet, academic center, and moderate mobility). A parent or guardian of each student was informed about the study and given the option to exclude their child from data collection. At the start of each survey administration, youth were reminded of the option to end their participation in the study at any time and to not answer any question(s) that made them feel uncomfortable. They were also informed of their right to withdraw their participation at anytime without consequence and all data have been kept confidential. Participants completed measures at four time points after the baseline measurement. Questions measured violent behaviors and experiences, substance use, sexual activity, social relationships, and family connections among other issues. At each wave, a three-member team administered the survey over a 2-hr period with a 5-min scheduled break (see Jagers, Morgan-Lopez, & Flay, 2009, for a more complete presentation of the AAYP).

Sample

We used data from the 553 African American adolescent male participants. The study received IRB approval and met ethical standards of research. Study participants were students from 12 schools recruited from poor metropolitan Chicago neighborhoods in 1993. Fifth grade was the first wave of data collection (1994-1995 school year). Less than 2% of parents requested exclusion of their children from the study (Jagers et al., 2009). Participating schools were randomly assigned to the Social Development Curriculum (n = 204), the School and Community (family and neighborhood Interventions) condition (n = 185), and the Health Enhancement Control condition (n = 182 participants). The groups did not differ significantly based on age, parent education level, length of time boys had lived in the neighborhood, or household income at baseline. Previous analyses showed no baseline differences on violence
measures after controlling for pre-intervention age and modeling school-level nesting (Jagers et al., 2009). The two intervention conditions had similar prevention effects compared with the Health Enhancement Control (Flay, Graumlich, Segawa, Burns, & Holliday, 2004). For this study, we combined these two intervention conditions (Ngwe et al., 2004). Intervention effects were controlled in the current study to account for potential influences.

**Measures**

Measures were based on multiple questionnaires (e.g., Youth Risk Behavior Surveillance Survey [YRBSS], National Health Interview Survey [NHIS], 1992). These Measures were adapted based on feedback from focus groups and pilot testing with adolescent and parents living in high-risk communities (Flay et al., 2004).

**Covariates.** Socio-demographic variables were standard measures of child’s age, average household income, and parent education. Length of time lived in the neighborhood was operationalized as a continuous measure.

**Witnessed physical violence.** Adolescents’ witnessing physical violence was determined using a five-item measure. All items were dichotomous (0 = no and 1 = yes), indicating whether adolescents had ever witnessed certain acts of physical violence. The total score ranged from 0 to 5 with higher scores indicating witnessing more physical violence. Item-scale correlations ranged from .33 to .52 (α = .68). Representative questions included “Have you ever seen someone get shot at” and “Have you ever seen a friend or family member get cut.”

**Peer violent behavior.** Participants were asked how many of their classmates they thought were involved in violent behaviors. The scale consisted of two items “How many of the students in your grade get into a physical fight?” and “How many of the students in your grade carry a knife, a razor, or a gun?” Both items were measured on a Likert scale with 0 = none of them, 1 = some of them, 2 = about half of them, 3 = most of them, and 4 = all of them. These two items account for serious and more normative form of adolescent violence. Combined scores ranged from 0 to 8, where higher scores indicated that participants believed that more of their peers were involved in violent behaviors. The items were correlated at r = .409, p < .001, and a Spearman Brown coefficient of .281, p < .01. The literature has suggested additional reporting of the Spearman Brown coefficient when exploring the reliability of two-item scales (Eisinga, Grotenhuis, & Pelzer, 2013).

**Peers’ expectations of violence.** Participants indicated how much their friends support violence or want them to engage in violent behaviors. The scale consisted of two items “Do your best friends want you to get into a physical fight?” and “Do your best friends want you to carry a knife, a razor, or a gun?” Both items were measured on a Likert scale with 0 = none of them, 1 = some of them, 2 = about half of them, 3 = most of them,
Scores ranged from 0 to 8, where higher scores indicated that participants believed that peers wanted them to engage in violent behaviors. These two items accounted for serious and more normative forms of peer deviance. The items had a Pearson’s correlation of .436, $p < .001$, and a Spearman Brown coefficient of .566, $p < .01$.

**Self-efficacy to avoid violence.** Four questions were used to determine boys’ self-efficacy to avoid violence. The questions were as follows: How sure are you that you can (a) keep yourself from getting into physical fights, (b) keep yourself from carrying a knife, (c) stay away from situations in which you could get into fights, (d) can seek help instead of fighting. Responses were reported on a 0 to 4 scale where 0 = *definitely cannot*, 1 = *maybe cannot*, 2 = *not sure*, 3 = *maybe can*, and 4 = *definitely can*. Scores ranged from 0 to 16 and higher scores indicated higher levels of perceived ability to avoid violence. Item-scale correlations ranged from .43 to .65 ($\alpha = .83$).

**Parents’ non-violent expectations.** Parents’ non-violent expectation was assessed using four items. Representative items included “Your parents want you to avoid carrying a knife or razor or gun?” and “Do your parents want you to stay away from situations where you could get into a fight?” All items were measured on a Likert scale where 0 = *definitely no*, 1 = *probably no*, 2 = *not sure*, 3 = *probably yes*, and 4 = *definitely yes*. The total score ranged from 0 to 16 with high scores indicating stronger belief that their parents expected them to avoid violence. Item-scale correlations ranged from .219 to .510 ($\alpha = .78$).

**Violent behavior.** This outcome variable represents adolescents’ report of engagement in violent behavior which was assessed using seven questions adapted from the 1992 YRBS. The YRBSS was originally developed for high school students. To use these measures with this sample, questions were modified to reflect the earlier stages of violence in which fifth- through eighth-grade students might engage. Participants indicated whether they had ever (a) threatened to beat up someone; (b) threatened to cut, stab, or shoot someone; (c) been in a physical fight; (d) carried a gun; (e) shot at someone; (f) carried knife or razor; and (g) cut or stabbed someone. Response choices were a simple dichotomy (0 = no; 1 = yes) for the lifetime involvement questions. A sum score was calculated for this measure. Scores ranged from 0 to 7 with high scores indicating more violent behaviors. Item-scale correlations ranged from .166 to .517 ($\alpha = .69$).

**Data Analysis**

SPSS and AMOS were used for bivariate and multivariable analysis, respectively. In the first step, we described means, $SD$s, and frequencies when appropriate. For bivariate analysis, we used Pearson correlation test between study constructs. We used structural equation modeling (SEM) for multivariable analysis. SEM allows for the simultaneous estimation of multiple meditational paths. This mode of analysis was also chosen because it allows for using multiple indicators to represent constructs, and
thus reduced measurement error. In addition, it facilitates the modeling of mediating relationships, error terms, and test coefficients.

A two-step modeling procedure was used, first fitting the measurement model and then testing the structural model (Kline, 2011). We used AMOS 19.0 (Arbuckle, 2009; Byrne, 2013). Missing data in the SEM procedure were addressed using full information maximum likelihood (FIML). We presented our three main variables (i.e., witnessed violence, self-efficacy to avoid violence, violent behaviors) as scales while the main mediators external to the individual (i.e., peer violent behavior, peers’ expectations of violence, parents’ non-violent expectations) were presented as latent factors. Violent behaviors is the outcome variable. Missing values were replaced using EM if they were operationalized as a scale. FIML was used for the latent factors. We reported the following fit statistics: chi-square, the comparative fit index (CFI; >.90), the root mean squared error of approximation (RMSEA; <.06), and $\chi^2$ to degrees of freedom ratio less than 2 (Hu & Bentler, 1999; Lei & Lomax, 2005). We controlled for the effect of the intervention, and reported the standardized regression weights. To confirm mediation, we calculated the Sobel test using coefficients for the relevant paths, in accordance with the recommendations of Baron and Kenny (1986).

For mediation, we used the Sobel (1982) first-order test, which is the most common product-of-coefficients test being used to test mediation. In the first step, we divided the indirect effect, $\hat{\alpha} \hat{\beta}$, by the first-order delta-method standard error of the indirect effect. Then we compared the value against a standard normal distribution to test for significance. Mediation is considered to be present if significance is found (Sobel, 1982).

**Results**

Participants on average were 13.5 years old ($SD = .62$) and had lived an average of 3.6 years ($SD = 1.36$) in their neighborhood with a maximum of 7 years of neighborhood residence. Almost half of the boys (47%) lived in two-parent families. The average household income was $10,000 and only 14% had an income of more than $40,000. Eighty percent of parents had completed high school or a 2-year college degree. More than 20% of parents had some college-level course work, earned a 4-year college degree, or had earned some post college–level degree (see Table 1).

The majority of the African American boys (84%) reported having witnessed a physical fight where someone was badly injured. Almost half of the boys had witnessed first-hand very serious violent acts including seeing someone get cut and stabbed or shot at. For almost 70% of these boys, their experiences were potentially more impactful as family members and friends were the victims of these violent acts. About 80% of the sample reported having threatened to beat up someone. This was the second most representative violent act. Physical fighting was the most common behavior with 96% reporting engagement in this behavior. Few had been involved in more serious behaviors like physical fights that lead to injury (15%). Smaller portions of the sample (12%) had threatened to cut or stab someone, or engaged in very serious acts like carrying a gun (12%), cutting/stabbing someone (7%), or shooting at someone (5%).
<table>
<thead>
<tr>
<th>Variables</th>
<th>M (SD)</th>
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<th>10</th>
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</thead>
<tbody>
<tr>
<td>1. Witnessed violence</td>
<td>2.64 (1.40)</td>
<td>1</td>
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<td>2. Violent behavior</td>
<td>2.82 (1.34)</td>
<td>.384**</td>
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<td>3. Peer violent behaviors</td>
<td>2.98 (1.06)</td>
<td>.149**</td>
<td>.216**</td>
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<tr>
<td>4. Peers’ expectations of violence</td>
<td>2.81 (1.30)</td>
<td>.141**</td>
<td>.293**</td>
<td>.328**</td>
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<td>5. Self-efficacy to avoid violence</td>
<td>11.17 (3.07)</td>
<td>−.165**</td>
<td>−.329**</td>
<td>−.154**</td>
<td>−.246**</td>
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<td>6. Parent non-violent expectations</td>
<td>12.05 (2.60)</td>
<td>−.108*</td>
<td>−.147**</td>
<td>−.189**</td>
<td>−.199**</td>
<td>.277</td>
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<td>7. Age</td>
<td>13.5 (.62)</td>
<td>.105*</td>
<td>.069</td>
<td>.018</td>
<td>.069</td>
<td>−.060</td>
<td>.073</td>
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<td>8. Interventiona</td>
<td>—</td>
<td>.008</td>
<td>−.023</td>
<td>−.057</td>
<td>.050</td>
<td>−.011</td>
<td>.087*</td>
<td>−.011</td>
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<tr>
<td>9. Incomea</td>
<td>4.5 (2.31)</td>
<td>−.031</td>
<td>−.079</td>
<td>−.013</td>
<td>−.078</td>
<td>.145**</td>
<td>.065</td>
<td>−.067</td>
<td>.030</td>
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<td>10. Parent educationa</td>
<td>5.61 (2.27)</td>
<td>−.115**</td>
<td>−.010</td>
<td>.025</td>
<td>−.083</td>
<td>.042</td>
<td>.094**</td>
<td>−.107*</td>
<td>−.027</td>
<td>.352**</td>
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<td>11. Lived in neighborhood</td>
<td>3.80 (1.36)</td>
<td>−.008</td>
<td>.026</td>
<td>.047</td>
<td>−.007</td>
<td>.030</td>
<td>.028</td>
<td>.002</td>
<td>.066</td>
<td>.038</td>
<td>.015</td>
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*aAverage income = $10,000; average education level = vocational education or some college.

*p < .05. **p < .001.
Witnessing physical violence was positively correlated with other risk factors including peers’ expectations of violent behavior (\(r = .140, p < .01\)) and with adolescents’ violent behavior (\(r = .384, p < .01\)). Witnessing physical violence was negatively correlated with self-efficacy to avoid violence (\(r = -.165, p < .01\)) and parents’ non-violence expectations (\(r = -.106, p < .05\)). Self-efficacy to avoid violence was negatively related to witnessing physical violence and peers’ expectations of violence. Parents’ non-violence expectations were positively related to self-efficacy to avoid violence (see Table 1).

Fit statistics for the measurement model were good, \(\chi^2 = 89.706, df = 57, p = .004, \chi^2 / df = 1.574, CFI = .949, RMSEA = .032, 90\% \text{ confidence interval [CI]} = [.019, .045]\). Standardized factor loadings for peer violent behavior and peers’ expectations of violence ranged from .358 to .793 and .528 to .833, respectively. The standardized loadings for parents’ non-violent expectations ranged from .516 to .678.

The full structural equation of the model also showed a good fit to the data, \(\chi^2 = 133.105, df = 87, p < .001, \chi^2 / df = 1.530, CFI = .928, RMSEA = .031, 90\% \text{ CI} = [.020, .041]\). The path from witnessing physical violence to violent behavior was significant and positive (\(\beta = .301, p < .001\)), suggesting that those who had witnessed more violence engaged in more violent acts (see Figure 1). This confirmed the first hypothesis.

The second hypothesis was not confirmed, as the mediation path between self-efficacy to avoid violence and witnessing physical violence and engagement in violent behaviors did not reach statistical significance (\(z = 1.806, p = .071\)). While witnessing physical violence had a negative effect on self-efficacy at both the bivariate and multivariate levels, Sobel test results did not confirm a significant level of mediation through self-efficacy. Tests of the third hypothesis found that witnessing physical violence also had an indirect effect on engagement in violence through adolescents’ expectation of peer violent behaviors (\(\beta = .317, p < .01\)). Peer violence influenced peers’ expectations of violence (\(\beta = .486, p < .01\)) and was associated with increased youth’s own violent behaviors (\(\beta = .296, p < .001\)).

Sobel tests were conducted to evaluate the indirect effect of witnessing violence through the two mediating variables. Peer violent behavior partially mediated the effect of witnessing physical violence on peers’ expectations of violence (\(z = 1.988, p = .04\)). Peers’ expectations of violence partially mediated the relationship between peer violent behavior and adolescents’ violent behaviors (\(z = 2.408, p = .02\)). These tests revealed a positive path from boys’ witnessing of physical violence to their report of peers’ physical violence. This indicated that boys who witnessed more physical violence also reported more violent acts among their peers. Boys who believed that their peers engaged in physical violence also believed that peers expect them to engage in physical violence. Boys who witnessed more physical violence had lower self-efficacy to avoid violence (\(\beta = -.088, p < .05\)), suggesting that their self-efficacy to avoid violence was negatively affected by witnessing physical violence.

For the fourth hypothesis, we found that the serial mediation continued from witnessing physical violence, peer violent behavior, and peers’ expectations of violence, and further functioned through self-efficacy to avoid violence. Peers’ expectations of violence were negatively associated with self-efficacy to avoid violence (\(\beta = -.205, .
The effect of peers’ expectations of violence on adolescents’ violent behavior was mediated by self-efficacy to avoid violence ($\hat{z} = 2.641, p = .01$).

The fifth hypothesis was confirmed with an indirect relationship between parents’ non-violent expectations and violent behavior, through self-efficacy to avoid violent behaviors. Parents’ non-violent expectations were linked to greater self-efficacy to avoid violence ($\beta = .354, p < .001$). Parents’ non-violent expectations were negatively associated with boys’ expectations of peer physical violence ($\beta = -.345, p < .01$). Boys who were more confident in their ability to avoid violence were less involved in violent behaviors ($\beta = -.177, p < .001$). Self-efficacy to avoid violence completely mediated the effect of parents’ non-violent expectations ($\hat{z} = -2.729, p = .01$) in association with violent behaviors.

**Discussion**

Previous studies have investigated the link between risk factors and violent behavior, but few have explored this association for African American boys who have witnessed physical violence. For instance, in a study based on the AAYP program, Ngwe and colleagues (2004) identified peer factors as mediators of the effect of the AAYP...
intervention, which may protect adolescents from violent behaviors. This study used a risk and resilience framework to explore how peer, individual, and parent-based factors help explain the link between witnessing physical violence and violent behavior for African American boys. The recent trend of violent and deadly police interactions with African American males in Ferguson and around the country suggests a need to explore how witnessing physical violence is related to similar behaviors and what factors may help protect African American adolescent males.

The most crucial finding from this study is that African American boys’ perception of parents’ expectations or norms is related to higher self-efficacy in avoiding violence. Interestingly, their report of parents’ non-violent expectations was not directly related to violent behaviors among these adolescents; rather, parents’ protective role functioned through African American boys’ self-efficacy to avoid violence. Research has shown that this relationship applied whether parents’ non-violent expectations or norms were explicitly stated or perceived by adolescent (Farrell et al., 2010; Ohene et al., 2006). The current study contributes to the literature by identifying self-efficacy to avoid violence as a critical path through which parents’ expectations may influence adolescent behaviors. As adolescents become more self-governing, it becomes more important to encourage their internal strengths as an effective channel for prevention efforts.

Farrell and colleagues (2008) found that when asked to identify factors that influenced violence-avoidance decisions, African American adolescents indicated that parents’ non-violence expectations or norms (“parents’ voice in their head”) were primary deterrents. We found that in the midst of the parent–peer struggle for influence over youth’s behavioral outcomes, parents remain relevant and effective in protecting African American adolescent boys. This study identifies parent non-violent expectations as a way to effectively protect African American boys even when parents are ostensibly absent. This supports previous research (e.g., Farrell et al., 2010), which suggests that parents play a pivotal role during adolescence, representing a source of protection, especially for African American boys who have witnessed physical violence. For beleaguered African American youth who have been exposed to violence, parental support remains a crucial form of protection (Thomas & Hope, 2015).

This study also adds to the literature which links witnessing physical violence and engagement in physical violence (Lindstrom Johnson et al., 2011; Neumann et al., 2010). The trauma of witnessing physical violence may make boys feel vulnerable (Cassidy & Stevenson, 2005). Boys may seek to understand their experiences through the lens of their friends’ violent behaviors as well as perception of their friends’ expectations related to violence. Negative peer influences are a significant risk for increasing violent behavior among African American boys (Copeland-Linder et al., 2007; Farrell et al., 2010; Lambert et al., 2005). We found that peer influence may be one mechanism through which witnessing physical violence may be linked to violent behaviors for African American boys. We found that witnessing more physical violence is associated with a greater expectation of peer violence, and peers’ expectations of violence. Both are in turn related to violent behaviors for African American boys. Results of this study may have implications for the prevention of violence and delinquency, as youth commit a significant portion of all violent crime (Snyder, 2000) and
experience among the highest rates of criminal victimization compared with any other age group (Bureau of Justice Statistics, 2001).

Adolescents tend to overestimate the negative behaviors of their peers while underestimating their own negative behaviors (Prinstein & Wang, 2005). Adolescents’ belief that peers expect them to engage in violence, and an expectation that same-aged youth or peers are involved in violence, may normalize violent behaviors. This may lead adolescent to perceive violence as an acceptable pattern of behavior (Haynie, Silver, & Teasdale, 2006)—what Stewart and Simons (2006) refer to as the “code of the streets.” Youth in disadvantaged neighborhoods who have assimilated the “code of the streets” and have witnessed violence are at increased risk of having interactions with the justice system both as victims and perpetrators. They are also more likely to become cynical of governmental systems (Thomas & Hope, 2015). For youth in communities like Fergusson, this fear and cynicism is supported by negative experiences with the police and is related to witnessing violence. The effect of witnessing physical violence therefore may skew adolescents’ perception about acceptability and popularity of physical violence among peers, and influence African American males’ own behaviors. On the other hand, as youth continually witness violence, they come to see it as unavoidable, and therefore beyond their ability to efficaciously avoid. Youth involvement in violence could therefore also be seen as acceptance of reality.

The finding that adolescent males’ belief that peers expect them to be violent partially mediates the link between witnessing physical violence and adolescents’ violent behavior supports studies showing neighborhood effects on youth behaviors (Haynie, Silver, & Teasdale, 2006). The social disorganization model originally proposed by Shaw and McKay (1942) posits that specific social processes may mediate the association between living in unsafe neighborhoods and adolescent violence. In particular, social disorganization theory conceptualizes neighborhoods as complex systems of friends, same-aged peers, and family networks that operate through different socialization processes (Bellair, 2000). Negative peer influence is conceptualized as a characteristic of social disorganization and is known to increase adolescent violence indirectly by increasing opportunities for adolescents to become involved in violent peer networks (Haynie et al., 2006).

Adolescence has been identified as a developmental period characterized by the increased influence of peers competing with that of parents (Sim, 2000). Findings from the current study suggest that while peer influences may increase the likelihood of violent behaviors for African American boys who witness physical violence, boys who believe that their parents do not want them to engage in violence may be less likely to engage in violence. Moreover, boys who believe that their peers engage in physical violence and have violent expectations of them are more likely to report less self-efficacy to avoid violence. While peers’ behaviors and expectations weaken boys’ self-efficacy to avoid violence in the face of having witnessed physical violence, parents have a protective role to play. The study identifies individual and parent factors that mitigate the relationship between witnessing physical violence and violent behaviors.

Previous studies have identified the deleterious role of witnessing physical violence, among other forms of violence (Lindstrom Johnson et al., 2011), and peer influences on
adolescents’ behavioral outcomes. The current study’s findings contribute to the literature by identifying African American males’ self-efficacy to avoid violence as a protective factor in light of peer influences and violent experiences. Peer influences (i.e., behaviors and expectations) appear to be a critical lens through which African American boys make meaning of their experiences of witnessing physical violence. Boys who witness more violent acts perceive more peer violence and are likely to report that peers expect them to engage in violence. Boys’ self-efficacy to avoid violence is associated with fewer violent outcomes. For these boys, however, peers’ violent expectations could imperil them toward violent behaviors by reducing self-efficacy to avoid violence.

Limitations

There are several limitations to this study. The measures of peer violent behaviors and peers’ expectations of violence did not represent the variety of violent behaviors in which adolescents could engage; however, both measures had indicators of less and more violent behaviors. Ngwe and colleagues (2004) have also demonstrated that estimates of friends’ behaviors were a significant mediator. While both of the current scales consisted of only two items, both measures were sound and made significant and interesting contributions to the overall model while addressing the key issue of physical violence in this study. Future research should determine whether this model works for different levels and kinds of violence when accounting for adolescents’ reports of peer violence by including a wider range of violent behaviors, and also examine gender differences.

This study featured reports from male adolescent African Americans only. Some research has demonstrated the additional benefit of having both parents and youth involvement in studies (Lewis et al., 2012). The exclusion of parent reports in this study, however, allowed us to explore more fully the adolescents’ perspectives and perceptions, especially with regard to the influence of cognitive risks and resources such as perceptions of peer and parent behaviors and expectations, and self-efficacy to avoid violence. An investigation of parent-based factors (e.g., monitoring, parenting styles, parent mental and physical health, and racial identity) that might influence adolescent behavior may also prove illuminating to the literature.

The current data suggest a sample of African American boys who engaged in high levels of physical violence evidenced by high reports of threatening to beat up someone and physical fighting. The data, however, provide no context for this. For instance, the reports of threatening and physical fighting may actually be age-appropriate sibling and peer disagreements which do not meet the higher descriptor connotation of violence. On the other hand, the data also contain more normally low levels of serious acts of violence (e.g., fights leading to injury, threats to cutting and stabbing, and carrying weapons). This allows the study to account for both normative – and high-level violence without limiting variance.

Attrition as well as inconsistencies or absence of some of the measures due to planned missingness across the intervention made the cross-sectional design most appropriate for the current study. Although our study is cross-sectional, like much of the research that investigates risks and protective factors for youth violence, we contribute to the literature by exploring structural models to determine potential pathways of influence among the
risks and protective factors. The findings do not address issues of causality; however, they identify multiple associations among risk and protective factors and violent behavior for boys who have witnessed physical violence, and highlight the significant role that boys’ own self-efficacy plays in deterring violent behavior. Additional research should examine the influence of risk and protective factors across time. Investigating these issues from a longitudinal perspective would determine how the protective value of key factors might change across developmental periods. In addition, this study focused on African American boys; thus, the influence of gender was not examined. An investigation of gender differences might reveal how these risk and protective factors function differently for adolescent boys and girls in the same high-risk contexts.

African American boys are more likely than any other ethnic group, male or female, to develop the negative outcomes associated with living in high-risk neighborhoods (Neumann, Barker, Koot, & Maughan, 2010). Those African American boys who witness physical violence can be resilient even in these high-risk contexts and the two main sources of strength were boys’ own self-efficacy beliefs and the conveyed non-violent expectations of parents. Witnessing violence remains a significant threat to positive development for African American boys, but parents’ non-violent expectations strengthen boys’ self-efficacy to avoid violence. Peer violent behaviors and expectations increase the possibility of violent behaviors; however, boys’ self-efficacy to avoid violence reduces the likelihood of this outcome. These findings are insightful because they focus positive attention on African American boys, and identify possible resources for working with families. The study further accentuates the positive influence of parents in protecting and supporting African American boys—an especially critical concern for adolescent and families living in poor, urban neighborhoods.

**Implications**

This study extends the current literature on how peers, parents, and youth’s individual strengths influence a major risk factor for the development of youth violence among African American boys who have witnessed physical violence. The findings of this study argue for the inclusion of adolescents’ cognitive skills/strengths in future efforts directed at attenuating and managing the effects of witnessing physical violence. Perception of peer violence and peer violent expectations are key mediators of witnessing violence. Adolescents’ awareness of parents’ non-violent expectations proves critical as these expectations boost African American boys’ self-efficacy to avoid violence (Ohene et al., 2006). Thus, skill building through parent reinforcement may prove effective in developing prevention efforts aimed at improving youth outcomes. In conjunction, community groups, health care providers, and public health specialists must work with parents to identify plausible and adaptive non-violent coping and problem-solving strategies that parents can then convey to their sons (Hall et al., 2012).

This study suggests that the influence of parents cannot be underestimated even during the peer-driven adolescence period. Social and mental health professionals should continue to encourage positive parenting practices, especially those practices that facilitate parents’ transmission of critical messages, and positive behavior modeling for their sons.
Some research has suggested that parents who use physical punishment as their main parenting strategy may unwittingly convey a provi-
olence message, especially for boys who may have witnessed violence in the neighbor-
hoods (Ohene et al., 2006). Research should explore the specific parenting strategies and
techniques that are used to convey these messages, as well as the role of the community
context, including the influence of “parental figures” (e.g., grandparents, church elders),
in subsidizing parental efforts. In addition, researchers should examine the effect of wit-
nessing violence perpetrated by a parent or against a parent on youth violence behavior.

Schools and communities may find it beneficial to work with relevant agencies to
help reduce community violence, and reduce adolescents’ exposure to these violent
experiences. This kind of intervention may be even more essential as African American
youth make meaning of the growing trend of deaths of African Americans males at the
hands of the Police. Community efforts could support parent messages that encourage
norms and beliefs that encourage adolescents to avoid violence. The school climate
should encourage non-violence and challenge normalized youth violence. Schools
must work diligently as part of the process of dispelling the often-misguided notion
that “Everyone is doing it” when it comes to violence and other risky behaviors.

School-based programs that promote non-violence and encourage norms against vio-
ence can reduce this behavior (Flay et al., 2004; Jagers et al., 2009) by adjusting
adolescents’ perception of peer behaviors and expectations. School-based programs
may also reduce the influence of peer pressure and the perception of violence as a
means for establishing social status or solving social conflict.

Parent expectations of non-violence and self-efficacy to avoid violence are both
associated with negative peer behaviors and expectations. School-based violence pre-
vention programs should include components that focus on addressing social-
cognitive skills (Boxer & Dubow, 2001), and take special notice of boys who have
witnessed physical violence. Although individual-level factors are an important target
of prevention efforts, interventions may have a limited effect if they do not also address
relevant environmental influences within the family, peer group, school, and commu-
nity domains (Farrell et al., 2010). Our study suggests that for male African American
adolescents who have witnessed physical violence, violent behaviors may best be
understood as functioning through peer and parent expectations, peer behaviors, and
adolescents’ self-efficacy to avoid violence.

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