Are Community Violence-Exposed Youth at Risk of Engaging in Delinquent Behavior? A Review and Implications for Residential Treatment Research and Practice

By: Jun Sung Hong, Hui Huang, Meghan Golden, Desmond Upton Patton, Tyreasa Washington

Abstract:

Numerous studies have documented a direct association between children's exposure to community violence and subsequent delinquent behavior. Regrettably, an understanding of the community violence exposure-delinquent behavior link is incomplete because violence-exposed children rarely engage in delinquency immediately. Rather, there are complex, developmental pathways in which these children experience behavioral problems before subsequently exhibiting delinquent behavior. Despite the importance of understanding the mechanisms that illuminate how children exposed to violence in the community might engage in delinquency, relatively few studies have investigated potential mechanisms. This review proposes four potential mechanisms: depression, anxiety/PTSD, conduct disorder, and aggression. More specifically, we examine how certain internalizing and externalizing behaviors can potentially mediate the relationship between community violence exposure and delinquent behavior. We also discuss implications for residential treatment research and practice.

Keywords: community violence | delinquency | residential treatment | violence | youth

Article:

In the United States, children, particularly those in low-income urban areas are exposed to unprecedented levels of violence in their communities (Kaynak, Lepore, & Kliewer, 2011; McDonald, Deatrick, Kassam-Adams, & Richmond, 2011). Although there has been a relative decline in overall violence since the early to mid-1990s (U.S. Department of Justice, 2013), youth homicide rates remained high (Centers for Disease Control and Prevention, 2002), and as many as 38% of adolescents nationwide had witnessed violence in their communities (Zinzow et

al., 2009). The rate of community violence exposure is particularly high in urban areas, as estimates indicate that over 90% of urban youth have been exposed to some form of violence in their communities (Kaynak et al.; McDonald et al.).

Community violence is broadly defined as events occurring in the local neighborhood involving criminal activities, weapons use, and violence or potential violence perpetrated by persons outside the immediate family (Bell & Jenkins, 1993) and can be experienced in several ways. *Witnessing* is one way many adolescents are exposed to violence, including sexual assault, burglary, weapon use, muggings, the sounds of gun shots, as well as the presence of teen gangs, drugs, and racial/ethnic divisions (National Center for Children Exposed to Violence, 2003). In inner cities across the country, as many as 88–90% of youth have witnessed a robbery, beating, stabbing, shooting, or murder at least once (Kaynak et al., 2011; McDonald et al., 2011). Witnessing violence may be categorized as either a chronic stressor or a day-to-day hassle (Miller & Townsend, 2005). For example, a chronic stressor might include witnessing ongoing gang violence and/or pressure to join a gang throughout the academic year.

The effects of exposure to community violence on child development have also received a significant amount of research attention (Burton & Jarrett, 2000). One of the most commonly researched outcomes is *delinquency* (Patchin, Huebner, McCluskey, Varano, & Bynum, 2006), defined as participating in illegal behavior by minors (Siegel & Welsh, 2011) and is determined both by age (under the legal age of majority) and behavior (law-breaking)(Stark, 1998). Disruptions occurring in children's community environment can predispose them to both violent and non-violent types of offenses during adolescence (Garbarino, 1999). Indeed, there has been empirical support for the association between children's exposure to community violence and delinquency (Chen, Voisin, & Jacobson, 2013; Gorman-Smith, Henry, & Tolan, 2004). Children who frequently witnessed violence in their neighborhoods are likely to engage in delinquency and criminal activities, such as assaultive behavior and weapon-carrying, during adolescence and adulthood (Patchin et al., 2006).

In addition to empirical support, numerous theories also provide explanations for the relationship between community violence exposure and delinquency. For instance, social learning theorists argue that children learn behaviors through observation, role modeling, and reinforcement in their immediate environments, such as home, school, and neighborhood (Monks et al., 2009). Children may learn to accept violence and delinquency as legitimate and may choose to participate in these activities when they are frequently exposed to those activities in their communities. Social disorganization theorists purport that disadvantaged and disorderly communities promote an environment in which crime and delinquency becomes pervasive (Sampson & Lauritsen, 1994), and earlier researchers (Shaw & McKay, 1942) argue that urban characteristics, such as poverty and low educational achievement can explain the emergence of criminal activities. Agnew's (1992) general strain theory asserts that children who are exposed to community violence typically have inadequate opportunities to achieve their life goals through legitimate institutionalized means. Youth's emotional and behavioral reactions to violence can

increase their tendency to engage in delinquency (Agnew). In other words, youth residing in a low-resourced community where exposure to violence is pervasive might have limited opportunities. These youth might find themselves in a position of financial strain, yet wish to attain material success, and therefore may be tempted to resort to crime and delinquency to achieve socially desirable goals (Bender, 2010). And finally, Hirschi's (1969) social control theorists propose that youth's interpersonal relationships and ties to conventional institutions that value law-abiding behaviors can decrease their likelihood of engaging in deviant and delinquent activities. However, neighborhoods that are characterized as dangerous and violent can limit youth's opportunities to be involved in organizations that foster law-abiding behaviors. As a result, these youth may develop a propensity to break the law.

The relationship between the community contexts and levels of criminal offending has long been documented in research and theory. Many studies have shown that youth's reactions to being witness to neighborhood crime and violence are complex and multifaceted. For example, research on the strengths of the relationship between community violence exposure and delinquent behavior mostly implies a causal mechanism linking the two (Rosario, Salzinger, Feldman, & Ng-Mak, 2008). Despite this sizable body of literature underscoring the importance of understanding the community context of delinquent behavior, research investigating the potential pathways that explicate or buffer the effects of community violence exposure on delinquency is rare (Wikstrom & Sampson, 2003). As a result, a serious research gap exists, despite the increased interest in the effects community has on delinquent behavior. Rarely do youth who are exposed to community violence immediately engage in delinquent behaviors. Scholars have recognized that delinquency emerges in some youth through complex pathways, in which a developing youth's risk for delinquency increases with each added exposure to violence or engagement in delinquency, as wells as continued exposure to deviant role models (Bender, 2010; Moffitt & Caspi, 2001). Regrettably, few researchers have examined potential mediators or moderators of this association (Rosario et al.), although a closer investigation of what leads violence-exposed youth down the path of violence is warranted.

This review aims to explore the mechanisms that potentially link community violence exposure and delinquency. More specifically, we focus on examining the development of behavioral problems due to community violence exposure, which can potentially increase the risk for delinquent behavior. The bulk of the U.S.-based research has focused on the association between youth's community violence exposure and behavioral outcomes, along with behavioral problems as predictors of delinquency. Taking into account the considerable amount of empirical support, it is important to examine whether youth's behavioral problems can provide a theoretical support for examining closely the pathway from exposure to community violence to delinquency. Although methodologically complex, an examination of these third variable effects can provide an optimal fit for the complexity in the provision of evidence-based practices and services for youth who are situated in an "at-risk" environment (Magill, 2011). Researchers, and the intervention practices they inform, have the tendency to address complex, multidimensional

social problems. This complexity has led many social scientists to voice concerns about evidence-based practice (Magill), as complex social environments make it difficult to make intervention decisions. Moreover, recent directions in social science research have targeted mediating risk factors to be interrupted and moderating protective factors to be enhanced (Fraser, 2004).Thus, we propose four potential mechanisms of internalizing and externalizing behaviors and delinquent behaviors.

MECHANISMS LINKING COMMUNITY VIOLENCE EXPOSURE AND DELINQUENCY

Internalizing and externalizing behaviors are examples of potential mechanisms that help explain the linkage between community violence exposure and juvenile delinquency. Children who witness violence in their community are significantly more likely to exhibit behavioral problems (Farrell & Sullivan, 2004; Fowler, Ahmed, Tompsett, Jozefowicz-Simbeni, & Toro, 2008; Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009; Ludwig & Warren, 2009; Mrug & Windle, 2009, 2010). A recent longitudinal study by Mrug and Windle (2010), which investigated the effects of children's exposure to violence within multiple contexts (i.e., home, school, and community) from a sample of 603 children, found that violence exposure is associated with both internalizing and externalizing behaviors. Similarly, researchers have also reported that internalizing and externalizing behaviors are predictive of delinquency (White, Moffitt, Earls, Robins, & Silva, 1990). To illustrate, White et al. reported that internalizing and externalizing behaviors during preschool years were the strongest predictors of delinquent problems during early adolescence (ages 11–15). Considering the relevance of behavioral problems in community violence exposure and delinquency, it is necessary to examine how certain internalizing and externalizing behaviors can potentially explain this relationship. Four potential mechanisms highlighted in this review include depression, anxiety/PTSD, conduct disorder, and aggression (Figure 1).
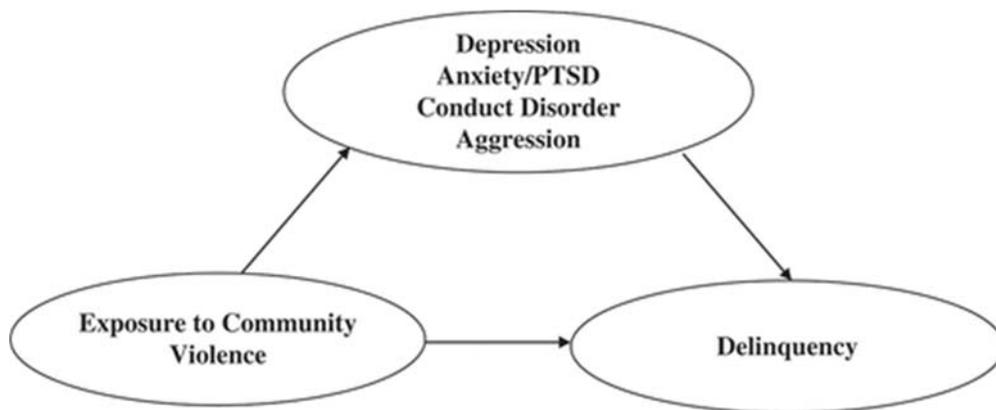

Figure 1. Mechanisms that potentially link community violence exposure and delinquency.

Depression

One internalizing behavior that has been commonly identified in relation to community violence exposure is depression. Children who are frequently exposed to violence in their communities are at a heightened risk of depression (Bruce, Farrell, Kliewer, & White, 1998; Fitzpatrick, Piko, Wright, & LaGory, 2005; Kaynak et al., 2011; McDonald & Richmond, 2008; McKelvey et al.,2011; Ozer & Weinstein, 2006; Rosario et al., 2008; Zinzow et al., 2009). Children exposed to violence may perceive their world as unsafe and that they are unworthy of being kept safe (Margolin & Gordis, 2004), which could undermine their behavioral adjustment and increase negative self-perceptions and a sense of hopelessness, thereby leading to depression. Ozer and Weinstein's study, which investigated community violence exposure and psychological functioning among urban adolescents, found that, even after controlling for daily hassles, increased exposure to violence predicted more self-reported depressive symptoms. Studies also reported that the correlations between community violence exposure and depressive symptoms ranged from $r = .11$ to $r = .51$ (Foster, Kuperminc, & Price, 2004; Hammack, Richards, Luo, Edlynn, & Roy, 2004; Ozer, 2005; Ozer & Weinstein,2006; Ruchkin, Henrich, Jones, Vermeiren, & Schwab-Stone, 2007; Self-Brown et al., 2006).

Depressive symptoms, in turn, predict involvement in delinquency. Children with depressive symptoms such as irritability may present through defiance and causing problems in the home and school (Akse, Hale, Engels, Raaijmakers, & Meeus, 2007), resulting in increased conflict with parents and peers and subsequent involvement in delinquency. Research findings also provide sufficient evidence that depression can contribute to delinquent behaviors for both male and female adolescents (Kofler et al.,2011; Manasse & Ganem, 2009; Obeidallah & Earls, 1999; Wiesner, 2003). Obeidallah and Earls examined the association between depression and delinquency, using a sample of 754 12 to15-year-old adolescent girls. Their findings revealed that mildly to moderately depressed girls were more likely to commit property crimes and crimes against others than nondepressed girls, even after controlling for socioeconomic status. Wiesner's study, which used a sample of 1,218 adolescents, also found that depression predicted delinquency. More recent studies also confirmed the existence of the depression-delinquency relationship. Manasse and Ganem reported that depressed male adolescents are 50% more likely to engage in delinquency than nondepressed males, and adolescents with elevated levels of depression displayed delinquent behaviors more frequently than nondepressed adolescents. Kofler et al. (2011) also found, from a representative sample of adolescents, that early depressive symptoms predicted later delinquency significantly more than early delinquency predicted changes in depressive symptoms.

Anxiety/PTSD

Anxiety is another internalizing behavior and a frequently investigated emotional outcome of exposure to community violence (e.g., Bruce et al., 1998), and one of the most common types of anxiety experienced by community violence exposed children is Post-Traumatic Stress Disorder

(PTSD); (Cohen, Staudenmayer, Suglia, & Wright, 2010; Fowler et al., 2009; Luna, 2006; Zinzow et al., 2009). These children are at significant risk of re-experiencing trauma, avoidance of stimuli associated with the episode, and increased arousal (Berman, Silverman, & Kurtines, 2000). One study, which compared children's violence exposure in the United States with war-torn countries, suggests that American children who witnessed community violence displayed PTSD symptoms similar to those by children in war-torn countries (Luna).

Youth who display anxiety and PTSD are vulnerable to delinquency involvement. Anxiety is a basic human emotion, which is an adaptive reaction to an unidentifiable or vague threat (Gullone, 2000). Because it is an unpleasant emotion, accompanied by a high level of physiological arousal, people have the tendency to control the anxiety in idiosyncratic ways (Kramer & Zimmerman,2009). Children who suffer from anxiety tend to exhibit greater levels of distress and lower levels of self-restraint, which increases their risk of delinquency. Loeber, Stouthamer-Loeber, and Raskin White (1999) found from a sample of male students in grades 1, 4, and 7, that children who displayed persistent anxiety are likely to engage in persistent substance use (to self-medicate) and delinquent behaviors (pick-pocketing, vandalism, weapon carrying, car theft, robbery, attacking) during middle to late childhood. Cross-sectional research also documented that youth involved in juvenile justice are also at risk of anxiety, which increases the severity of delinquent behaviors. For example, the findings of Monahan Goldweber, Meyer, and Cauffman (2012) indicate that trait anxiety was associated with greater delinquent behavior among incarcerated female adolescents. Similar to anxiety, PTSD can also manifest in delinquency as well as frequency of arrest (Becker & Kerig, 2011). PTSD symptoms are higher for incarcerated female delinquents than for girls in the general population (Cauffman, Feldman, Watherman, & Steiner, 1998). The relationship between PTSD and delinquency is even stronger for youth with past histories of childhood sexual abuse. That is, youth with childhood sexual abuse histories are likely to experience PTSD, putting them at risk of delinquency (Danielson et al.,2010; Feiring, Miller-Johnson, & Cleland, 2007).

Conduct Disorder

Conduct disorder appears to be a relevant externalizing behavior outcome of children's community violence exposure (Cammack,2011; McCabe, Hough, Yeh, Lucchini, & Hazen, 2005; Mrug & Windle, 2009; Pearce, Jones, Schwab-Stone, & Ruchkin, 2003). According to the Diagnostic and Statistical Manual of Mental Disorder IV-TR, *conduct disorder* is defined as a frequent and persistent pattern of behavior in which the basic rights of others or age-appropriate societal rules or norms are violated (American Psychiatric Association, 2000). There are some overlaps between conduct disorder and delinquency. However, conduct disorder is typically diagnosed during childhood, whereas delinquency is normally reported among adolescents. The chronological order of the two diagnoses allows researchers to recognize the differences between conduct disorder and delinquent behavior and to investigate conduct disorder as a potential mediator. Children who frequently witness violence are predisposed to exhibit difficulty in their interactions with peers, teachers, and adult figures

(Margolin & Gordis, 2000), which indicates an underlying lack of social competence. This lack of social skills may serve as a significant risk factor for conduct disorder (Weaver, 2005). Additionally, conduct disorder is reinforced through the negative behaviors of neighborhoods and peers (Leventhal & Brooks-Gunn, 2000). Individual behavior in the neighborhood can influence conduct disorder through modeling (Pearce et al., 2003). Several longitudinal findings support this association. McCabe et al. (2005) found that community violence exposure contributed to the development of conduct disorder among 12- to 17-year-old adolescents. Mrug and Windle (2009) also reported that community violence exposure was linked to greater frequency of conduct disorder for boys over time. In a similar finding, boys who reside in a low-income public housing engage in delinquent behaviors more frequently than those residing in more resource-rich communities (Wikström & Loeber, 2000).

Conduct disorder can subsequently result in delinquent behaviors (Foley, Carlton, & Howell, 1996; O'Shaughnessy, 1992; Pardini & Fite, 2010; Pardini, Obradovic, & Loeber, 2006). Conduct disorder and delinquency often co-occur in youth with behavioral problems. Despite the co-occurrences and significant overlaps, there are several differences. For instance, youth with conduct disorder frequently have more complex behavioral problems, verbal skill deficits, and frontal lobe dysfunctions than do those identified as juvenile delinquents (Loeber, Burke, Lahey, Winters, & Zera, 2000). Conduct disorder is the most common DSM diagnostic precursor to serious delinquency (O'Shaughnessy). Fergusson and Horwood (1995) reported that 90% of youth with three or more symptoms of conduct disorder at age 15 were frequent offenders at age 16.

Aggression

And, finally, aggression is another externalizing behavior that frequently results from exposure to community violence (Bolland, Henly, Sieving, & Stoddard, 2011; Spano, Rivera, & Bolland, 2006; Brady, Gorman-Smith, Henry, & Tolan, 2008; Lambert, Boyd, Cammack, & Ialongo, 2012; Sams & Truscott, 2004). Various forms of children's aggressive behaviors exist, including direct, physical, verbal, material, relational, indirect, and social aggression (Card, Stucky, Sawalani, & Little, 2008; Little, Jones, Henrich, & Hawley, 2003). Although many of these types overlap considerably, two types of aggressive behaviors can be distinguished—*overt* (verbal and physical behaviors with the intent to cause harm) and *relational* (acts intended to damage another child's friendships or peer group membership; Card & Little, 2006). Studies have also documented that early exposure to violence was the strongest predictor of aggression (e.g., Brady et al., 2008). Children who witness violence might adopt aggressive identities to avoid victimization and attribute meaning to their world, in which violence is the norm and aggression is a necessary means of survival (Garbarino, Kostleny, & Dubrow, 1991). These findings are also in line with social learning theory, suggesting that violence exposure can reinforce aggression and weaken children's disinhibition toward behaving aggressively (Bandura, 1986). Physiological theorists also argue that youth exposed to community violence experience arousal, which can trigger aggressive behavior.

Aggressive behavior puts children at risk for later delinquency (McEachern & Snyder, 2012). Children identified as aggressive may be likely to affiliate with an aggressive peer group, which increases the propensity of them to engage in violence and delinquency (Harachi et al., 2006). Peer group membership is important for adolescents, and peer groups are formed based on similarities in behavior (Espelage, Holt, & Henkel, 2003). Moreover, considering that males have been considered the more aggressive gender (Coie & Dodge, 1998), it is not surprising that aggressive behavior during childhood is a significant risk for violence and delinquency for males during adolescence (Broidy et al., 2003).

IMPLICATIONS FOR RESIDENTIAL TREATMENT RESEARCH AND PRACTICE

This review investigated mediating factors that might clarify the community violence exposure-delinquency trajectory. Overall, research suggests that children exposed to violence display elevated levels of internalizing and externalizing behaviors, and consequently are at a heightened risk of delinquency. These findings highlight the importance of understanding the mediating influences of depression, anxiety/PTSD, conduct disorder, and aggression on children's behaviors. It is also important to investigate other potentially relevant mechanisms, such as academic performances and deviant peer relations (Nofziger & Kurtz, 2005). For instance, Sharkey (2010) documented that exposure to homicide in the local community reduced academic performance substantially for African American children. Poor academic performance could lead to special education placement and stigma, which impact children's self-esteem, thereby leading to acting-out behaviors. Researchers need to explore mediating influences of broader level systems and structural factors operating in low-resourced communities such as racial residential inequality (Sampson & Wilson, 1995), structural disadvantages (Mouw, 2000), and de-centralization of employment opportunities (Jargowsky, 1996), any or all of which can limit low-income children's access to important resources and frequently expose them to dangerous situations. As argued by McNulty and Bellair (2003), researchers have paid less attention to the larger structural contexts in which individuals are situated, despite extensive theory regarding the role of concentrated poverty and related disadvantages in low-resourced communities.

Likewise, internalizing and externalizing behaviors rarely occur in isolation, and it is imperative that researchers examine the comorbidity of various mediators. For instance, recent researchers have found that both internalizing and externalizing behaviors frequently co-occur, which lead to unique behavioral profiles (Kunimatsu & Marsee, 2012; Marsee, Weems, & Taylor, 2008). A recent review of studies conducted by Kunimatsu and Marsee found that there are numerous correlates of anxiety and aggression, and anxiety co-occurs more frequently with various types of aggression, such as relational, reactive, and reactive relational aggression. The authors concluded that conceptualizing anxiety and aggression as components of the larger fight/flight system reflects the importance of the inter-connectedness of these behaviors, which are dictated by the same underlying emotional and cognitive mechanisms (Kunimatsu & Marsee).

There is also a critical need for understanding the moderating effects of family, peer, and school support, which might buffer the association between community violence exposure and delinquency. Moreover, considering that a number of researchers have reported gender differences in the effects of community violence exposure and delinquent behavior, it is also necessary to examine gender as a potential moderator. An investigation of the moderating factors is necessary for understanding when, or under what conditions the relationship between the predictor and criterion variables is likely to occur. Relatedly, moderators are the social or personal resources that can attenuate the effects of community violence exposure on children's behavior. Understanding and testing relevant moderators can help identify modifiable risk factors, which can then inform practice.

Most importantly, an examination of the pathways from community violence exposure to delinquency can illuminate effective prevention and intervention strategies in residential treatment centers for violence-exposed children who are at risk of delinquency. In recent years, moderators and mediators of intervention effects have been of increased interest, and across behavioral science research domains (Magill, 2011). Behavioral scientists have begun to recognize the importance of probing into more complex questions of intervention effectiveness that speak to variations by agency, clinician, or client factors, as well as questions about the mechanisms through which interventions produce their effects (Magill). Such directions can inform a more evidence-based practice in residential treatment centers and provide practitioners and staff members with empirically supported guidelines for assessing what factors to target in delinquency prevention. For instance, should research findings indicate depressive and anxiety symptoms as significant intermediary factors, practitioners and staff members in residential treatment centers could work with parents in identifying an effective treatment plans for youth who suffer from these symptoms because of community violence exposure. Cognitive-behavior therapy has been commonly identified as an effective intervention for addressing and reducing depression and anxiety (Compton et al., 2004), as well as reducing recidivism among juvenile offenders (Landenberger & Lipsey, 2005; D. B. Wilson, Bouffard, & Mackenzie, 2005). Moreover, there is also strong support for parent and caregiver education and social skills training for children in reducing the early onset of conduct disorder and aggression (Nangle, Erdley, Carpenter, & Newman, 2002; Webster-Stratton, Reid, & Hammond, 2004). School-based intervention programs also constantly showed effects for preventing or reducing aggressive behavior (S. J. Wilson & Lipsey, 2007; Wilson, Lipsey, & Derzon,2003). Although assisting at-risk youth in modifying negative attitudes and behaviors is necessary, it is even more important that practitioners and staff members in residential treatment centers help affected youth to develop psychological resilience and help them find positive and constructive ways to cope with difficult situations in their communities (Garbarino, 1999).

CONCLUSION

Jump to section

The relationship between community violence exposure and delinquency is complex, which requires a rigorous empirical investigation that employs a longitudinal research design and utilizes sophisticated research methods (e.g., structural equation modeling) with a representative sample to better understand these mediating influences (Bender, 2010). The primary focus of this article is to review internalizing and externalizing behaviors that can potentially mediate the relationship between community violence exposure and delinquency. However, it is critical that researchers and practitioners consider other potentially relevant intermediary factors (e.g., deviant peer influences), particularly broader level factors (e.g., quality of life) that might elucidate this link. American communities are not uniform, and given the racial/ethnic diversity in many of these communities, researchers might consider examining racial/ethnic differences in the association between youth's exposure to community violence and delinquent behavior. To this end, identifying potentially relevant intermediary factors is an important first step. The next step is to test these empirically to inform evidence-based treatment plans for youth in residential treatment centers who have been frequently and persistently exposed to violence.

REFERENCES

1. Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, *30*, 47–87.doi:10.1111/j.1745 9125.1992.tb01093.x

2. Akse, J., Hale III, W. W., Engels, R. C. M. E., Raaijmakers, Q. A. W., & Meeus, W. H. J. (2007). Stability and change in personality type membership and anxiety in adolescence. *Journal of Adolescence, 30*, 813–834. doi:10.1016/j.adolescence.2006.09.007

3. American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorder (Fourth Edition, Text Revision). Washington, DC: American Psychiatric Association.

4. Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.

5. Becker, S. P., & Kerig, P. K. (2011). Posttraumatic stress symptoms are associated with the frequency and severity of delinquency among detained boys. *Journal of Clinical Child and Adolescent Psychology*, *40*, 765–771. doi:10.1080/15374416.2011.597091

6. Bell, C. C., & Jenkins, E. J. (1993). Community violence and children on Chicago's southside. *Psychiatry: Interpersonal and Biological Processes*, *56*, 46–54.

7. Bender, K. (2010). Why do some maltreated youth become juvenile offenders? A call for further investigation and adaptation of youth services. *Children and Youth Services Review*, *32*, 466–473. doi:10.1016/j.childyouth.2009.10.022

8. Berman, S. L., Silverman, W. K., & Kurtines, W. M. (2000). *Children's and adolescents' exposure to community violence, post-traumatic stress reactions, and treatment implications*. Retrieved from http://www.massey.ac.nz/˜trauma/issues/2000- 1/berman.htm

9. Bolland, J., Henly, S., Sieving, R., & Stoddard, S. (2011). Social connection, trajectories of hopelessness, and serious violence in impoverished urban youth. *Journal of Youth and Adolescence*, *40*, 278–295. doi:10.1007/s10964-010-9580-x

10. Brady, S., Gorman-Smith, D., Henry, D., & Tolan, P. (2008). Adaptive coping reduces the impact of community violence exposure on violent behavior among African American and Latino male adolescents. *Journal of Abnormal Child Psychology*, *36*, 105–115. doi:10.1007/s10802-007-9164-x

11. Broidy, L. M., Tremblay, R. E., Brame, B., Fergusson, D., Horwood, J. L., Laird, R., … Vitaro, F. (2003). Developmental trajectories of childhood disruptive behaviors and adolescent delinquency: A six-site, cross-national study. *Developmental Psychology*, *39*, 222–245. doi:10.1037/0012-1649.39.2.222

12. Bruce, S., Farrell, A., Kliewer, W., & White, K. (1998). Impact of exposure to community violence on anxiety: A longitudinal study of family social support as a protective factor for urban children. *Journal of Child and Family Studies*, *7*, 187–203. doi:10.1023/A:1022943216319

13. Burton, L. M., & Jarrett, R. L. (2000). In the mix, yet in the margins: The place of families in urban neighborhood and child development research. *Journal of Marriage and the Family*, *62*, 1114–1135. doi:10.1111/j.1741-3737.2000.01114.x

14. Cammack, N. L. (2011). The role of crime, community violence exposure, and perceived neighborhood violence in the development of conduct problems among African American youth (Unpublished doctoral dissertation). George Washington University, Washington, DC.

15. Card, N. A., & Little, T. D. (2006). Proactive and reactive aggression in childhood and adolescence: A meta-analysis of differential relations with psychosocial adjustment. *International Journal of Behavioral Development*, *30*, 466–480. doi:10.1177/0165025406071904

16. Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, *79*(5), 1185–1229. doi:10.1111/j.1467-8624.2008.01184.x

17. Cauffman, E., Feldman, S., Watherman, J., & Steiner, H. (1998). Posttraumatic stress disorder among female juvenile offenders. *Journal of the American Academy of Child & Adolescent Psychiatry*, *37*, 1209–1216. doi:10.1097/00004583-199811000-00022

18. Centers for Disease Control and Prevention. (2002). *Youth violence*. National Center for Injury Prevention and Control. Retrieved from http://www.cdc.gov/ncipc/factsheets/yvfacts.htm

19. Chen, P., Voisin, D. R., & Jacobson, K. C. (2013). Community violence exposure and adolescent delinquency: Examining a spectrum of promotive factors. *Youth & Society*. doi:10.1177/0044118X13475827

20. Cohen, S., Staudenmayer, J., Suglia, S., & Wright, R. (2010). Posttraumatic stress symptoms related to community violence and children's diurnal cortisol response in an urban community-dwelling sample. *International Journal of Behavioral Medicine*, *17*, 43–50. doi:10.1007/s12529-009-9044-6

21. Coie, J. D., & Dodge, K. A. (1998). Aggression and antisocial behavior. In N. Eisenberg (Ed.), Handbook of child psychology, Vol. 3 (pp. 779–862). New York, NY: Wiley.

22. Compton, S. N., March, J. S., Brent, D., Albano, A. M., Weersing, V. R., & Curry, J. (2004). Cognitive-behavioral psychotherapy for anxiety and depressive disorders in children and adolescents: An evidence-based medicine review. *Journal of the American Academy of Child & Adolescent Psychiatry*, *43*, 930–959. doi:10.1097/01.chi.0000127589.57468.bf

23. Danielson, C. K., Macdonald, A., Amstadter, A. B., Hanson, R., de Arellano, M. A., Saunders, B. E., … Kilpatrick, D.G. (2010). Risky behaviors and depression in conjunction with—or in the absence of—lifetime history of PTSD among sexually abused adolescents. *Child Maltreatment*, *15*, 101–107. doi:10.1177/1077559509350075

24. Espelage, D. L., Holt, M. K., & Henkel, R. R. (2003). Examination of peer group contextual effects on aggression during early adolescence. *Child Development*, *74*, 205–220. doi:10.1111/1467-8624.00531

25. Farrell, A., & Sullivan, T. (2004). Impact of witnessing violence on growth curves for problem behaviors among early adolescents in urban and rural settings. *Journal of Community Psychology*, *32*, 505–525. doi:10.1002/jcop.20016

26. Feiring, C., Miller-Johnson, S., & Cleland, C. M. (2007). Potential pathways from stigmatization and internalizing symptoms to delinquency in sexually abused youth. *Child Maltreatment*, *12*, 220–232. doi:10.1177/1077559507301840

27. Fergusson, D. M., & Horwood, L. J. (1995). Predictive validity of categorically and dimensionally scored measures of disruptive childhood behaviors. *Journal of the American Academy of Child and Adolescent Psychiatry*, *34*, 477–485. doi:10.1097/00004583-199504000-00015

28. Fitzpatrick, K. M., Piko, B. F., Wright, D. R., & LaGory, M. (2005). Depressive symptomatology, exposure to violence, and the role of social capital among African American adolescents. *American Journal of Orthopsychiatry*, *75*, 262–274. doi:10.1037/0002-9432.75.2.262

29. Foley, H. A., Carlton, C. O., & Howell, R. J. (1996). The relationship of attention deficit hyperactivity disorder and conduct disorder to juvenile delinquency: Legal implications. *Bulletin of the American Academy of Psychiatry and Law*, *24*, 333–345.

30. Foster, J. D., Kuperminc, G. P., & Price, A. W. (2004). Gender differences in posttraumatic stress and related symptoms among inner-city minority youth exposed to community violence. *Journal of Youth and Adolescence*, *33*, 59–69. doi:10.1023/A: 1027386430859

31. Fowler, P. J., Ahmed, S. R., Tompsett, C. J., Jozefowicz-Simbeni, D. M. H., & Toro, P. A. (2008). Community violence and externalizing problems: Moderating effects of race and religiosity in emerging adulthood. *Journal of Community Psychology*, *36*, 835–850.

32. Fowler, P. J., Tompsett, C. J., Braciszewski, J. M., Jacques-Tiura, A. J., & Baltes, B. B. (2009). Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development & Psychopathology*, *21*, 227–259. doi:10.1017/S0954579409000145

33. Fraser, M. W. (2004). Intervention research in social work: Recent advances and continuing challenges. *Research on Social Work Practice*, *14*, 210–222.

34. Garbarino, J. (1999). Lost boys: Why our sons turn violent and how we can save them. New York, NY: Anchor Books.

35. Garbarino, J., Kostelny, K., & Dubrow, N. F. (1991). What children can tell us about living in danger. *American Psychologist*, *46*, 376–383. doi:10.1037/0003-066X.46.4.376

36. Gorman-Smith, D., Henry, D. B., & Tolan, P. H. (2004). Exposure to community violence and violence perpetration: The protective effects of family functioning. *Journal of Clinical Child and Adolescent Psychology*, 33, 439–449.

37. Gullone, E. (2000). The development of normal fear: a century of research. *Clinical Psychology Review*, *20*, 429–451. doi:10.1016/S0272-7358(99)00034-3

38. Hammack, P. L., Richards, M. H., Luo, Z., Edlynn, E. S., & Roy, K. (2004). Social support factors as moderators of community violence exposure among inner-city African American young adolescents. *Journal of Clinical Child and Adolescent Psychology*, *33*, 450–462. doi:10.1207/s15374424jccp3303_3

39. Harachi, T. W., Fleming, C. B., White, H. R., Ensminger, M. E., Abbott, R. D., Catalano, R. F., … Haggerty, K. P. (2006). Aggressive behavior among girls and boys during middle childhood: Predictors and sequelae of trajectory group membership. *Aggressive Behavior*, *32*, 279–293. doi:10.1002/ab.20125

40. Hirschi, T. (1969). Cause of delinquency. Berkeley, CA: University of California Press.

41. Jargowsky, P. A. (1996). Take the money and run: Economic segregation in U.S. metropolitan areas. *American Sociological Review*, *61*, 984–998.

42. Kaynak, O., Lepore, S. J., & Kliewer, W. L. (2011). Social support and social constraints moderate the relation between community violence exposure and depressive symptoms in an urban adolescent sample. *Journal of Social and Clinical Psychology*,*30*, 250–269. doi:10.1521/jscp.2011.30.3.250

43. Kofler, M. J., McCart, M. R., Zajac, K., Ruggiero, K. J., Saunders, B. E., & Kilpatrick, D. G. (2011). Depression and delinquency covariation in an accelerated longitudinal sample of adolescents. *Journal of Consulting and Clinical Psychology*, *79*, 458–469. doi:10.1037/a0024108

44. Kramer, U., & Zimmerman, G. (2009). Fear and anxiety at the basis of adolescent externalizing and internalizing behaviors.*International Journal of Offender Therapy and Comparative Criminology*, *53*, 113–120. doi:10.1177/0306624X07312779

45. Kunimatsu, M. M., & Marsee, M. A. (2012). Examining the presence of anxiety in aggressive individuals: The illuminating role of fight-or-flight mechanisms. *Child and Youth Care Forum*, *41*, 247–258. doi:10.1007/s10566-012-9178-6

46. Lambert, S. F., Boyd, R. C. Cammack, N. L., & Ialongo, N. S. (2012). Relationship proximity to victims of witnessed community violence: Associations with adolescent internalizing and externalizing behaviors. *American Journal of Orthopsychiatry*,*82*, 1–9. doi:10.1111/j.1939-0025.2011.01135.x

47. Landenberger, N. A., & Lipsey, M. W. (2005). The positive effects of cognitive–behavioural programs for offenders: A meta-analysis of factors associated with effective treatment. *Journal of Experimental Criminology*, *1*, 451–476. doi:10.1007/s11292- 005-3541-7

48. Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, *128*, 309–337. doi:10.1037/0033-2909.126.2.309

49. Little, T. D., Jones, S. M., Henrich, C. C., & Hawley, P. H. (2003). Disentangling the "whys" from the "whats" of aggressive behavior. *International Journal of Behavioral Development*, *27*, 122–133. doi:10.1080/01650250244000128

50. Loeber, R., Burke, J. D., Lahey, B. B., Winters, A., & Zera, M. (2000). Oppositional defiant and conduct disorder: A review of the past 10 years, Part 1. *Journal of the American Academy of Child & Adolescent Psychiatry*, *39*, 1468–1484. doi:10.1097/00004583-200012000-00007

51. Loeber, R., Stouthamer-Loeber, M., & Raskin White, H. (1999). Developmental aspects of delinquency and internalizing problems and their association with persistent juvenile substance

use between ages 7 and 18. *Journal of Clinical Child Psychology*,*28*, 322–332. doi:10.1207/S15374424jccp280304

52. Ludwig, K., & Warren, J. (2009). Community violence, school-related protective factors, and psychosocial outcomes in urban youth. *Psychology in the Schools*, *46*, 1061–1073. doi:10.1002/pits.20444

53. Luna, M. (2006). The traumatic impact of growing up in community violence: How that impact compares to impact on children growing up in war-torn countries. *School Social Work Journal*, *31*, 19–29.

54. Magill, M. (2011). Moderators and mediators in social work research: Toward a more ecologically valid evidence base for practice. *Journal of Social Work*, *11*, 387–401.

55. Manasse, M. E., & Ganem, N. M. (2009). Victimization as a cause of delinquency: The role of depression and gender. *Journal of Criminal Justice*, *37*, 371–378. doi:10.1177/1468017310379930

56. Margolin, G., & Gordis, E. B. (2000). The effects of family and community violence on children. *Annual Review of Psychology*, *51*, 445–479. doi:10.1146/annurev.psych.51.1.445

57. Margolin, G., & Gordis, E. B. (2004). Children's exposure to violence in the family and community. *Current Directions in Psychological Science*, *13*, 152–155. doi:10.1111/j.0963-7214.2004.00296.x

58. Marsee, M. A., Weems, C. F., & Taylor, L. K. (2008). Exploring the association between aggression and anxiety in youth: A look at aggressive subtypes, gender, and social cognition. *Journal of Child and Family Studies*, *17*, 154–168. doi:10.1007/s10826- 007-9154-1

59. McCabe, K. M., Hough, R. L., Yeh, M., Lucchini, S. E., & Hazen, A. (2005). The relation between violence exposure and conduct problems among adolescents: A prospective study. *American Journal of Orthopsychiatry*, *75*, 575–584. doi:10.1037/0002- 9432.75.4.575

60. McDonald, C. C., Deatrick, J. A., Kassam-Adams, N., & Richmond, T. S. (2011). Community violence exposure and positive youth development in urban youth. *Journal of Community Health*, *36*, 925–932. doi:10.1007/s10900-011-9391-5

61. McDonald, C. C., & Richmond, T. R. (2008). The relationship between community violence exposure and mental health symptoms in urban adolescents. *Journal of Psychiatric and Mental Health Nursing*, *15*, 833–849. doi:10.1111/j.1365-2850.2008.01321.x

62. McEachern, A. D., & Snyder, J. (2012). Gender differences in predicting antisocial behaviors: Developmental consequences of physical and relational aggression. *Journal of Abnormal Child Psychology*, *40*, 501–512.

63. McKelvey, L., Whiteside-Mansell, L., Bradley, R., Casey, P., Conners-Burrow, N., & Barrett, K. (2011). Growing up in violent communities: Do family conflict and gender moderate impacts on adolescents' psychosocial development? *Journal of Abnormal Child Psychology*, *39*, 95–107. doi:10.1007/s10802-010-9448-4

64. McNulty, T. L., & Bellair, P. E. (2003). Explaining racial and ethnic differences in adolescent violence: Structural disadvantage, family well-being, and social capital. *Justice Quarterly*, *20*, 1–31. doi:10.1111/j.1745-9125.2003.tb01002.x

65. Miller, D. B., & Townsend, A. (2005). Urban hassles as chronic stressors and adolescent mental health: The Urban Hassles Index. *Brief Treatment and Crisis Intervention*, *5*, 85–94. doi:10.1093/brief-treatment/mhi004

66. Moffitt, T. E., & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways among males and females. *Development and Psychopathology*, *13*, 355–375.

67. Monahan, K. C., Goldweber, A., Meyer, K., & Cauffman, E. (2012). Anxiety and antisocial behavior: The moderating role of perceptions of social prominence among incarcerated females. *Youth & Society*, *44*, 76–94. doi:10.1177/0044118X10396634

68. Monks, C. P., Smith, P. K., Naylor, P., Barter, C., Ireland, J. L., & Coyne, I. (2009). Bullying in different contexts: Commonalities, differences and the role of theory. *Aggression and Violent Behavior*, *14*, 146–156. doi:10.1016/j.avb.2009.01.004

69. Mouw, T. (2000). Job relocation and the racial gap in unemployment in Detroit and Chicago, 1980 to 1990. *American Sociological Review*, *65*, 730–753.

70. Mrug, S., & Windle, M. (2009). Bidirectional influences of violence exposure and adjustment in early adolescence externalizing behaviors and school connectedness. *Journal of Abnormal Child Psychology*, *37*, 611–623. doi:10.1007/s10802-009-9304-6

71. Mrug, S., & Windle, M. (2010). Prospective effects of violence exposure across multiple contexts on early adolescents' internalizing and externalizing problems. *Journal of Child Psychology & Psychiatry*, *51*, 953–961. doi:10.1111/j.1469- 7610.2010.02222.x

72. Nangle, D. W., Erdley, C., Carpenter, E. M., & Newman, J. E. (2002). Social skills training as a treatment for aggressive children and adolescents: A developmental-clinical integration. *Aggression and Violent Behavior*, *7*, 169–199. doi:10.1016/S1359- 1789(00)00040-9

73. National Center for Children Exposed to Violence. (2003). *Community violence*. Retrieved from http://www.nccev.org/violence/community.html

74. Nofziger, S., & Kurtz, D. (2005). Violent lives: A lifestyle model linking exposure to violence to juvenile violent offending.*Journal of Research in Crime and Delinquency*, *42*, 3–26. doi:10.1177/0022427803262061

75. Obeidallah, D. A., & Earls, F. J. (1999). Adolescent girls: The role of depression in the development of delinquency: Summary of research. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.

76. O'Shaughnessy R. J. (1992). Clinical aspects of forensic assessment of juvenile offenders. *Psychiatric Clinic of North America*,*15*, 721–735.

77. Ozer, E. J. (2005). The impact of violence on urban adolescents: Longitudinal effects of perceived school connection and family support. *Journal of Adolescent Research*, *20*, 167–192. doi:10.1177/0743558404273072

78. Ozer, E. J., & Weinstein, R. S. (2006). Exposure to violence and mental health among Chinese American urban adolescents.*Journal of Adolescent Health*, *39*, 73–79. doi:10.1016/j.jadohealth.2005.09.015

79. Pardini, D. A., & Fite, P. J. (2010). Symptoms of conduct disorder, oppositional defiant disorder, Attention-Deficit/Hyperactivity disorder, and callous-unemotional traits as unique predictors of psychosocial maladjustment in boys: Advancing an evidence base for DSM-V. *Journal of the American Academy of Child and Adolescent Psychiatry*, *49*, 1134–1144. doi:10.1016/j.jaac.2010.07.010

80. Pardini, D., Obradovic, J., & Loeber, R. (2006). Interpersonal callousness, hyperactivity/impulsivity, inattention, and conduct problems as precursors to delinquency persistence in boys: A comparison of three grade-based cohorts. *Journal of Clinical Child and Adolescent Psychology*, *35*, 46–59. doi:10.1207/s15374424jccp3501_5

81. Patchin, J. W., Huebner, B. M., McCluskey, J. D., Varano, S. P., & Bynum, T. S. (2006). Exposure to community violence and childhood delinquency. *Crime & Delinquency*, *52*, 307–332. doi:10.1177/0011128704267476

82. Pearce, M. J., Jones, S. M., Schwab-Stone, M. E., & Ruchkin, V. (2003). The protective effects of religiousness and parent involvement on the development of conduct problems among youth exposed to violence. *Child Development*, *74*, 1682–1696. doi:10.1046/j.1467-8624.2003.00631.x

83. Rosario, M., Salzinger, S., Feldman, R. S., & Ng-Mak, D. S. (2008). Intervening processes between youths' exposure to community violence and internalizing symptoms over time: The roles of social support and coping. *American Journal of Community Psychology*, *41*, 43–62. doi:10.1007/s10464-007-9147-7

84. Ruchkin, V., Henrich, C. C., Jones, S. M., Vermeiren, R., & Schwab-Stone, M. (2007). Violence exposure and psychopathology in urban youth: The mediating role of posttraumatic stress. *Journal of Abnormal Child Psychology*, *35*, 578–593. doi:10.1007/s10802-007-9114-7

85. Sampson, R. J., & Lauritsen, J. L. (1994). Violent victimization and offending: Individual-, situational-, and community-level risk factors. In A. J. Reiss & J. A. Roth (Eds.), *Understanding and preventing violence* (Vol. 3). Washington, DC: National Academy Press.

86. Sampson, R. J., & Wilson, W. J. (1995). Toward a theory of race, crime and urban inequality. In J. Hagan & R. D. Peterson (Eds.), Crime and inequality (pp. 37–54). Stanford, CA: Stanford University Press.

87. Sams, D. P., & Truscott, S. D., (2004). Empathy, exposure to community violence, and use of violence among urban, at-risk adolescents. *Child & Youth Care Forum*, *33*, 33–50. doi:10.1023/B: CCAR.0000013756.88343.5f

88. Self-Brown, S. R., LeBlanc, M., Kelley, M. L., Hanson, R., Laslie, K., & Wingate, A. (2006). Effects of community violence exposure and parental mental health on the internalizing problems of urban adolescents. *Violence & Victims*, *21*, 183–198. doi:10.1891/vivi.21.2.183

89. Sharkey, P. (2010). The acute effect of local homicides on children's cognitive performance. *Proceedings of the National Academy of Sciences*, *107*, 11733–11738. doi:10.1073/pnas.1000690107

90. Shaw, C. R., & McKay, H. D. (1942). Juvenile delinquency in urban areas. Chicago, IL: University of Chicago Press.

91. Siegel, L. J., & Welsh, B. (2011). Juvenile delinquency: The core (*4th ed.*). Belmont, CA: Wadsworth.

92. Spano, R., Rivera, C., & Bolland, J. (2006). The impact of timing on exposure to violence on violent behavior in a high poverty sample of inner city African American youth. *Journal of Youth and Adolescence*, *35*, 681–692. doi:10.1007/s10964-006-9080-3

93. Stark, R. (1998). Sociology (7th ed.). Belmont, CA: Wadsworth.

94. U.S. Department of Justice. (2013). *Juvenile arrests 2011. Juvenile offender and victims: National Report Series Bulletin*. Retrieved from http://www.ojjdp.gov/pubs/244476.pdf

95. Weaver, C. M. (2005). Childhood exposure and adolescent conduct problems. Unpublished master's thesis, University of Notre Dame, Notre Dame, Indiana.

96. Webster-Stratton, C., Reid, M. J., & Hammond, M. (2004). Treating children with early-onset conduct problems: Intervention outcomes for parent, child, and teacher training. *Journal of Clinical Child & Adolescent Psychology*, *33*, 105–124. doi:10.1207/S15374424JCCP3301_11

97. White, J. L., Moffitt, T. E., Earls, F., Robins, L., & Silva, P. A. (1990). How early can we tell? Predictors of childhood conduct disorder and adolescent delinquency. *Criminology*, *28*, 507–535.

98. Wiesner, M. (2003). A longitudinal latent variable analysis of reciprocal relations between depressive symptoms and delinquency during adolescence. *Journal of Abnormal Psychology*, *112*, 633–645. doi:10.1037/0021-843X.112.4.633

99. Wikström, P. O., & Loeber, R. (2000). Do disadvantaged neighborhoods cause well adjusted children to become adolescent delinquents? A study of male juvenile serious offending, risk and protective factors, and neighborhood context. *Criminology*, *38*, 1109–1141. doi:10.1111/j.1745-9125.2000.tb01416.x

100. Wikström, P. O., & Sampson, R. J. (2003). Social mechanisms of community influences on crime and pathways in criminality. In B. Lahey, T. Moffitt, & A. Caspi (Eds.), Causes of Conduct Disorder and Serious Juvenile Delinquency (pp. 118–148). New York: Guilford Press.

101. Wilson, D. B., Bouffard, L. A., & Mackenzie, D. L. (2005). A quantitative review of structured, group-oriented, cognitive-behavioral programs for offenders. *Criminal Justice and Behavior*, *32*, 172–204. doi:10.1177/0093854804272889

102. Wilson, S. J., & Lipsey, M. W. (2007). School-based interventions for aggressive and disruptive behavior: Update of a meta-analysis. *American Journal of Preventive Medicine*, *33*, S130–S143. doi:10.1016/j.amepre.2007.04.011

103. Wilson, S. J., Lipsey, M. W., & Derzon, J. H. (2003). The effects of school-based intervention program on aggressive behavior: A meta-analysis. *Journal of Consulting and Clinical Psychology*, *71*, 136–149. doi:10.1037/0022-006X.71.1.136

104. Zinzow, H., Ruggiero, K., Resnick, H., Hanson, R., Smith, D., Saunders, B., … Kilpatrick, D. (2009). Prevalence and mental health correlates of witnessed parental and community violence in a national sample of adolescents. *Journal of Child Psychology & Psychiatry*, *50*, 441–450. doi:10.1111/j.1469-7610.2008.02004.x