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# Using Police Data to Measure Children's Exposure to Neighborhood Violence: A New Method for Evaluating Relations Between Exposure and Mental Health

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Studies have identified a robust association between children's exposure to violence and their mental health. Yet, most of this research has been based on self-reported exposure and self-reported mental health. In this study, we used a new, map-based method via police data for measuring children's exposure to violent crime and compared it to child self-reports and parent reports of exposure. Results suggest that child self-reports of violence exposure may not be valid except for exposure to murder, but police and parent reports of violent crime can reveal interesting relations between violence and mental health. Children showed higher levels of internalizing problems in the absence of police-reported murder and parent-reported robbery. Discussion emphasizes implications for measurement as well as theory building.

**Keywords:** exposure; violent crime; children; neighborhood; mental health

Exposure to community violence is associated with several adverse behavioral and mental health outcomes for children and adolescents (e.g., Buka, Stichik, Birdthistle, & Earls, 2001; Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009; Martinez & Richters, 1993). Children who encounter violence in some form or another in their neighborhoods and broader communities are at risk for aggression, traumatic stress reactions, depression, anxiety, and substance use (Fowler et al., 2009). Troublingly, national surveys in the United States have documented that substantial proportions of the youth population witness and/or are victimized by violence in their communities (Finkelhor, Turner, Ormrod, & Hamby, 2010; Ybarra et al., 2008). Consequently, the U.S. Attorney General has launched a policy, research, and practice initiative aimed at reducing such exposure (Holder, 2011), and new approaches to helping

children affected by community violence have been developed (Kliewer et al., 2011). It is difficult to cast such efforts as anything but positive—many children are growing up in communities wracked by violence and are in need of targeted interventions to improve their functioning.

Despite this, it is important to understand that the empirical foundations upon which those efforts rest really are anything but solid. Most studies linking children's exposure to community violence to their mental health status solely have used self-report measures of both exposure and mental health. These self-report measures ascertain children's recollections of the extent of their experiences with violence and the nature and extent of their mental health symptoms via survey or interview methods (Brandt, Ward, Dawes, & Flisher, 2005; Fowler et al., 2009). On one hand, there is no problem with this technique because it is essential to understand children's perspectives and perceptions of their personal experiences.

Yet, on the other hand, there is a fundamental problem with this technique because it is impossible to know whether children are describing their experiences veridically or as the function of their own perceptual biases. Meta-analytic evidence suggests that reports of recent violence exposures produce stronger effects than do reports of exposure over more distal periods (Fowler et al., 2009). But, not one study relying on children's self-reports of exposure can report with certainty on the precise time frames of exposure; although, research relying solely on police reports to examine crime effects on adjustment has done so (Sharkey, 2010). And finally, studies relying on children's self-report of exposure suffer from a very real criterion problem—not a single study has been published documenting the extent to which children's reports of violence in their communities correlate with actual violent events in their communities.

Going further, classic work in children's encounters with highly traumatizing events has found that children's accurate recall of events is affected by several factors including their physical proximity to the event as well as the time elapsed since the event (Pynoos et al., 1987). Critical commentary on measures of children's exposure to violence also has implied that children's reports of violence are entirely the function of their own perceptual states rather than any objective criteria such as time and place (Brandt et al., 2005; Guterman, Cameron, & Staller, 2000; Trickett, Durán, & Horn, 2003). It also should be mentioned that children might simply not recognize the spatial boundaries implied by questions about their "neighborhood"; what children construe as their neighborhoods might vary considerably from what researchers consider their neighborhoods to be (Basta, Richmond, & Wiebe, 2010; Kruger, 2008).

In short, researchers and practitioners in the field have taken it at face value that children's reports of violence exposure are valid. Accurate reporting might lie as much in an interviewer's ability to access and document such information because it is in the child's ability to recollect it. It is reasonable to propose that the first step in developing accurately specified theoretical models of how violence exposure affects children's mental health, or designing effective intervention strategies for children at risk of exposure, is indeed the reliable and valid accounting of such violence exposure itself. Moreover, the finding that children's reports are predictive of their mental health status provides unambiguous support only to the idea that children's perceptual states relate to their emotional/behavioral states, or to the proposition that children self-select into situations that place them at risk for exposure. This is underscored by the finding produced through meta-analysis that the documented links between children's violence exposure and mental health are stronger when derived through same-rater methods (i.e., child/child

or parent/parent) as compared to discrepant-rater methods (i.e., child/parent or parent/child; Fowler et al., 2009).

Data from this study challenge the notion that children consistently can report accurately on violence in their neighborhoods. Using a validated operational definition of neighborhood (i.e., 0.25-mile radius around a home; Kruger, 2008), we investigated two issues: First, to what extent are children (and their parents) aware of violent events that occur in their neighborhoods? Second, are links between violence exposure and children's mental health symptoms artifacts of reporter bias, or is there a mere presence effect of neighborhood violence that does not require children to have specific knowledge of or direct exposure to violent events?

## METHODS

### Participants

Participants for this study were 132 youth (42% male; mean age = 12.55 years,  $SD = 1.07$ , range = 11–14 years; 86% Black/African American; 10% Hispanic/Latino/Latina; 4% multiethnic); one adult caregiver for each youth also participated. All were residents of a large Northeastern city of the United States comprising economically distressed “inner-city” and relatively better-off urban neighborhoods. The city is a major urban center with levels of violent crime higher than national averages on most indicators and levels of economic risk factors on par with or worse than other major metropolitan regions. Caregiver reports indicated that the average household income of participants was in the range of about \$10,000–\$30,000 yearly (mean income level = 2.74,  $SD = 2.11$ , and median = 2.00 on a scale where 1 = *under \$10,000* and 11 = *\$100,000 or more*) and the average highest level of education among all adults in participants' households was between high school diploma/general equivalency diploma (GED) and some college education (mean education level = 2.84,  $SD = 1.27$ , and median = 3.00 on a scale where 1 = *less than high school* and 8 = *graduate degree, doctoral*). Most families were headed by single parents, either alone (55%) or with other adult relatives (21%); most parents were biological (92%).

### Measures

***Exposure to Violence: Parent and Youth Reports.*** Parents and youth participated in private interviews in separate offices. Parents responded to questions about their child's experiences with violence during the prior 3 months. Youth responded to questions about their own experiences with violence during the prior 3 months. Questions addressed each of four forms of violence: physical assault, robbery, murder, and sexual assault. Prior to specific question prompts, participants viewed a brief slide presentation identifying and explaining the term violence and then each form of violence:

When we say “violence,” we mean when someone uses physical force on purpose in a way that could cause death or physical injury. The FBI and the police say that a “violent crime” is one of the following things: 1) A physical assault: Someone gets punched, kicked, slapped hard, or attacked with some kind of weapon; 2) A robbery: Someone gets something stolen or taken from them by force, like in a mugging; 3) A murder; 4) A sexual assault: Someone is forced to do something sexual against their will in a way that could cause them harm.

After the slide presentation, participants responded to sets of questions for each form of violence. Parents responded to the following question stem: "In the past 3 months, has [name of child] been exposed to [form of violence] in your neighborhood (close to where you live)?" Youth responded to the following question stem: "In the past 3 months, have you been exposed to [form of violence] in your neighborhood (close to where you live)?" Responses were recorded as yes (1) or no (0).

**Exposure to Violence: Police Reports.** After interviews, we submitted family residential addresses to the Comparative Statistics (CompStats) unit of our city's police force and obtained detailed crime maps showing the nature and location of all crimes (part 1 crimes known to law enforcement; Federal Bureau of Investigation [FBI], 2010) occurring within the 0.25-mile radius during the 3 months prior to the date of assessment. We then generated counts of all crimes recorded in each of the four categories covered in our child/parent interviews and then, because of our interest in assessing broad awareness of the presence of any violent crime, we rescaled these to dichotomous indicators (1 = any crime known to law enforcement, 0 = no crime known to law enforcement).

**Youth Psychopathology.** Prior to the exposure questions, parents completed the Child Behavior Checklist (CBCL) and youths completed the Youth Self-Report (YSR) of the CBCL to yield indicators of externalizing (e.g., aggression) and internalizing (e.g., depression, anxiety) behavior problems (Achenbach & Rescorla, 2001). The CBCL and YSR are well-established, commonly used measures of child and adolescent psychopathology and have been normed extensively for youth ages 4–18 years (CBCL) and 11–18 years (YSR). Youths also completed the Child Posttraumatic Stress Disorder (PTSD) Scale to yield an indicator of overall PTSD symptoms (Foa, Johnson, Feeny, & Treadwell, 2001). This is a self-report survey measure tapping all 17 hallmark symptoms of PTSD as delineated in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; American Psychiatric Association, 2000).

## Procedures

All procedures were conducted following approval by our university's institutional review board. Data were collected in the context of a larger project on youths' experiences in the urban community. Through widespread community recruitment, parents/caregivers interested in participating contacted our offices to determine their eligibility. Similar to other studies drawing predominantly ethnic minority samples from inner-city and urban areas (Clay, Ellis, Amodeo, Fassler, & Griffin, 2003; Hatchett, Holmes, Duran, & Davis, 2000; Kliewer et al., 2006; Reed, Foley, Hatch, & Mutran, 2003), participants were recruited through a mix of targeted outreach efforts to the community, including the distribution of project fliers, presentations to community groups (e.g., public school social workers, parents attending community center activities), and "word of mouth" snowball recruitment through higher profile community agents (e.g., school principals, recreation center directors, church officials).

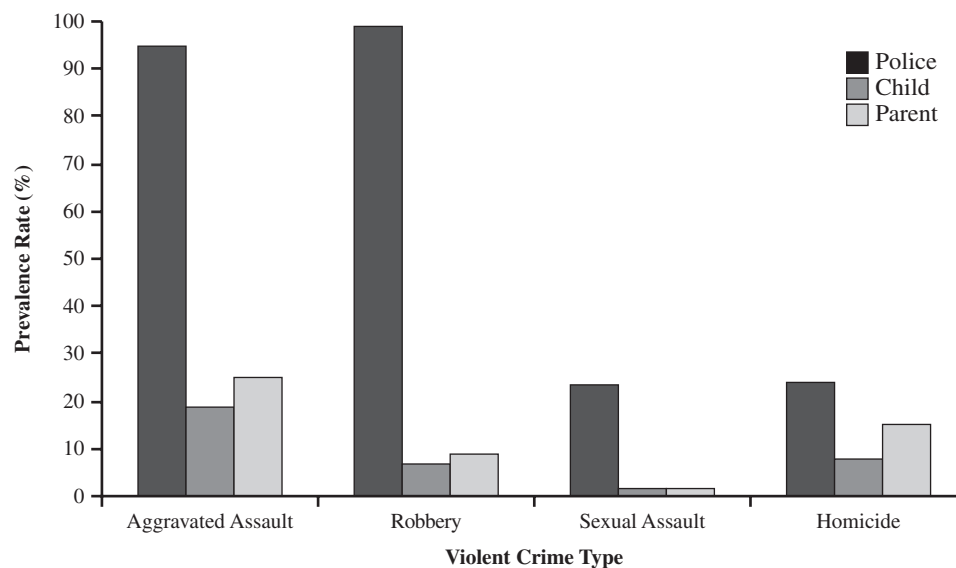
Families participating had to be residents of the city where data collection occurred, the parent/caregiver had to have legal custody or guardianship of the youth, and the target youth had to be between the ages of 11 and 14 years inclusive. At appointed times, eligible families (youth and at least one parent/caregiver) came to our university campus office and were guided through an informed consent procedure. The YSR and CBCL were administered by interviewers, whereas the measures of PTSD and exposure were presented via desktop computers. At the end of the procedure, participants received \$80 (\$40 youth, \$40 parent/caregiver).



## RESULTS AND DISCUSSION

For each family, we had three unique sources of information about neighborhood violent crime: child, parent, and police record. Figure 1 shows the 3-month prevalence of incidents across reporters and violent crime categories. The first analytic task was to determine the overall extent of agreement among these three sources. We computed four indexes of association for each pair of observations within each of the four categories of violent crime—chi-square, contingency coefficient (bivariate correlation), kappa, and prevalence-adjusted bias-adjusted kappa (PABA  $\kappa$ ; Byrt, Bishop, & Carlin, 1993). These analyses showed uniformly that with only one exception, children and parents seemed not at all aware of or exposed to violent crimes in their neighborhoods. Chi-square values were nonsignificant and kappa values were small for all reporter pairs in the categories of aggravated assault, sexual assault, and robbery. In the category of homicide, however, agreement between children and police records was significant ( $\chi^2 [1] = 3.909, p = .048, \kappa = .139, \text{PABA } \kappa = .515$ ). PABA  $\kappa$  values across categories revealed more consistent agreement because of smaller base rates of crime (i.e., PABA  $\kappa$  indexes high levels of agreement on the absence as well as presence of events). We also examined correspondence with police data of an “either/or” category of child and parent reports; this did not improve any indicators of agreement across crime categories. Importantly, we also observed no correspondence between child and parent reports (Table 1).

Having established that children’s reports of violence in their neighborhoods show criterion validity primarily, if not exclusively, with respect to murders, we next explored relations between indicators of exposure and indicators of children’s mental health. As noted, researchers have documented consistent and robust positive relations between exposure to violence and various mental health outcomes, albeit almost entirely via child self-reports. Surprisingly, then, we observed no significant relations (all  $p > .05$ ) between all forms of child-reported exposure and both parent- and child-reported indicators of children’s mental health.



**Figure 1.** Three-month prevalence of violent crime incidents by type of informant.

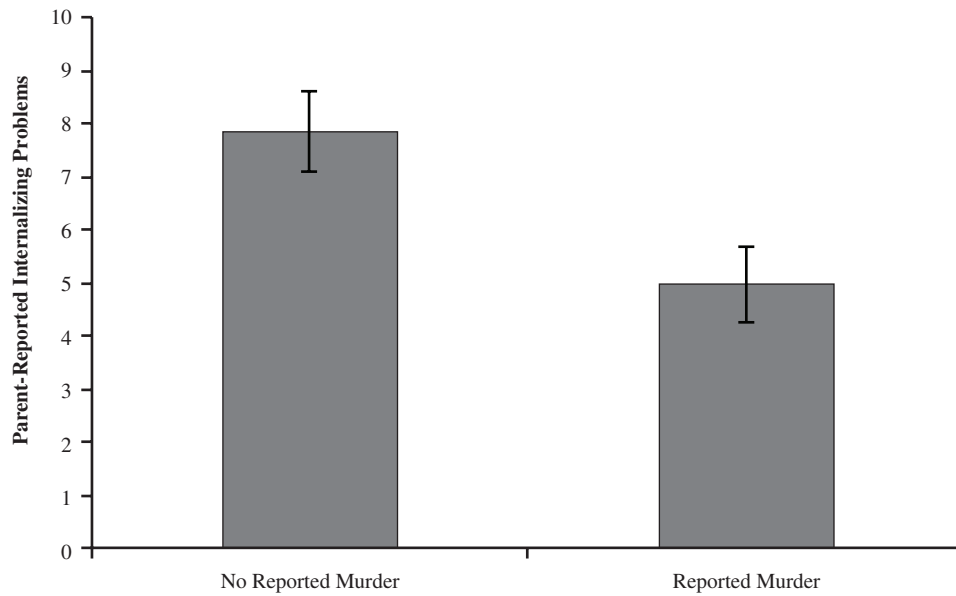
**TABLE 1. Indicators of Agreement Across Informant Pairs**

Crime Type/Data Source Pair	$\chi^2$	<i>p</i>	$\kappa$	PABA $\kappa$	<i>CC</i>
Aggravated assault					
Child/parent	0.806	.369	.077	.363	.161
Child/police	1.727	.189	.026	-.515	.114
Parent/police	0.050	.823	-.005	-.455	-.020
(Child or parent)/police	0.272	.602	.016	-.196	.045
Rape/sexual assault					
Child/parent	0.031	.860	-.015	.939	.015
Child/police	0.795	.373	.033	.530	.078
Parent/police	0.623	.430	-.029	.500	-.069
(Child or parent)/police	0.005	.942	.004	.500	.006
Murder					
Child/parent	0.198	.656	.036	.606	.039
Child/police	3.909	.048	.139	.515	.172
Parent/police	0.007	.932	.007	.363	.007
(Child or parent)/police	1.208	.272	.095	.363	.096
Robbery					
Child/parent	2.015	.156	.122	.742	.123
Child/police	0.074	.786	.001	-.848	.024
Parent/police	0.101	.751	.002	-.803	.028
(Child or parent)/police	0.169	.681	.003	-.696	.036

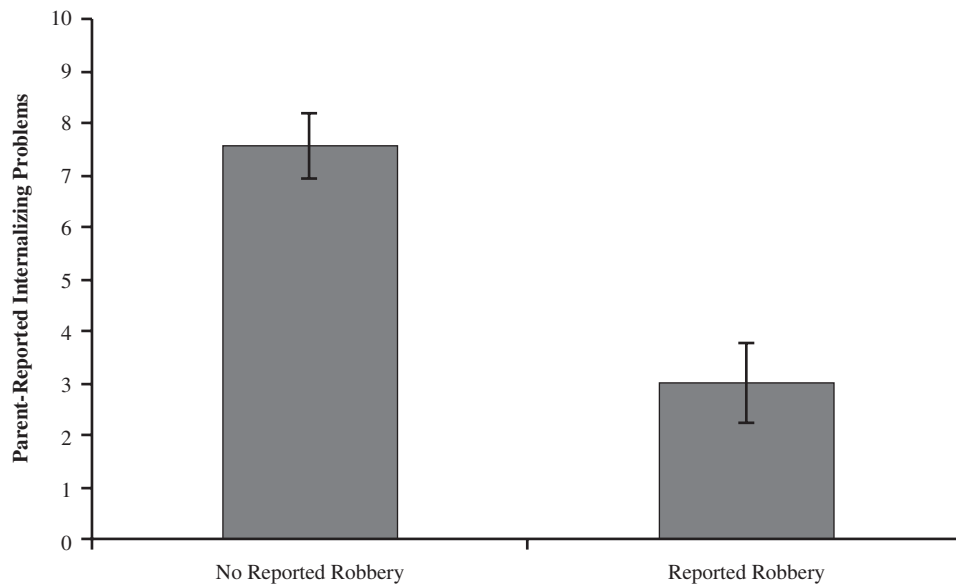
*Note.* *p* = *p*-value for chi-square test;  $\kappa$  = kappa; PABA  $\kappa$  = prevalence-adjusted bias-adjusted kappa; *CC* = contingency coefficient.

Even more surprisingly, when using police data and parent-reported indicators of exposure, we observed effects opposite from the typical direction. Specifically, the presence of murder in a neighborhood as indicated by police records was associated with lower levels of parent-rated internalizing problems for children (Figure 2). The presence of robbery in a neighborhood as indicated by parent reports also was associated with lower levels of parent-rated internalizing problems for children (Figure 3).

Given that our focus in measuring children's exposure to violence was on high-impact violent crimes, it is possible that one explanation for our finding that, according to parents' reports, children showed higher levels of internalizing symptoms in the absence of murder (via police record) and robbery (via parent report) lies in desensitization models. Recent work (Bartholow, Bushman, & Sestir, 2006; Gaylord-Harden, Cunningham, & Zelecik, 2011; Ng-Mak, Salzinger, Feldman, & Stueve, 2004) using data drawn from field research as well as the laboratory suggests that individuals can become desensitized or pathologically adapted to violence. For example, in a large sample of urban youth, Ng-Mak et al. (2004)



**Figure 2.** Parent-rated internalizing problems in relation to police-rated murder. Means significant via  $t$  test corrected for unequal variances between groups;  $t(98.26) = 2.77$ ,  $p < .01$ ,  $d = 0.56$ .



**Figure 3.** Parent-rated internalizing problems in relation to parent-reported robbery. Means significant via  $t$  test corrected for unequal variances between groups;  $t(29.34) = 4.48$ ,  $p < .001$ ,  $d = 1.65$ .



observed a subgroup of youth highly exposed to community violence and highly involved in antisocial behavior but reporting very low levels of emotional distress. This sort of finding also is compatible with studies showing that exposure to community violence is linked to greater approval of aggression as a conflict resolution strategy (Guerra, Huesmann, & Spindler, 2003) and that general neighborhood risk is associated over time with increased moral disengagement (Hyde, Shaw, & Moilanen, 2010). Indeed, recent theorizing asserts that the normalization of violence through repeated exposure is a key process linking witnessed violence to engagement in habitual aggressive behavior but not necessarily emotional distress (Bandura, 1999; Boxer & Sloan-Power, 2013; Huesmann & Kirwil, 2007; Ng-Mak, Stueve, Salzinger, & Feldman, 2002). On a related point, other research has found that crime tends generally to be stable over time in its locations (Weisburd, Bushway, Lum, & Yang, 2004). It might, thus, be surmised that children living in neighborhoods marked by some degree of persistence in serious violent crime have become acclimated emotionally to it, or adapted cognitively to it, resulting in average levels of anxious and depressed symptoms lower in comparison to children not living in such neighborhoods.

Our finding of no significant relations between children's reports of their violence exposure and indicators of their mental health status suggests a few explanations. First, it might be the case that children simply are not sensitive to the spatial or temporal boundaries of their experiences with violence. As noted earlier, studies of children's experiences with highly traumatizing events have reported recall biases related to several factors including proximity to events and time since the events (Pynoos et al., 1987). Some scholars have proposed that children's reports of violence emanate solely from their own perceptions rather than actual links to time and place (e.g., Brandt et al., 2005), and others have proposed that children's conceptions of their neighborhood boundaries might be at odds with what researchers or even the police consider to be their neighborhoods (Basta et al., 2010).

Whatever the case, our results suggest that greater precision is warranted when investigating the effects on children of violence exposure and that researchers might continue to consider alternative methodologies for operationalizing and measuring exposure such as the incorporation of more precise police reports or the integration of more detailed spatial assessments (Basta et al., 2010). It might not be possible to derive a perfectly veridical measure of children's exposure to violence, but it is likely the case that triangulating their exposure through multisource assessments will yield the most accurate estimates. Going forward, it also is likely to be the case that multimethod approaches to gauging exposure will be most fruitful with respect to specifying most clearly which patterns of exposure are linked to adverse outcomes.

Our findings imply that greater caution is warranted when drawing inferences from any observed relations between violence exposure and children's outcomes, especially with respect to attempts at identifying and targeting children at greatest need for intervention services secondary to their violence exposure. This is especially important given increasing attention to the damaging effects of polyvictimization (i.e., victimization by violence across different contexts, or multiple forms of victimization within or across contexts; Boxer & Terranova, 2008; Finkelhor, Ormrod, & Turner, 2007) or multiple-context exposures (i.e., witnessing and/or being victimized by violence across different contexts; Boxer et al., 2013; Mrug & Windle, 2010). From the standpoint of refining theory and advancing practice, researchers should strive to incorporate multidimensional assessments of children's experiences with violence (Boxer & Sloan-Power, 2013).

## REFERENCES

- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA School-Age Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, 3, 193–209.
- Bartholow, B. D., Bushman, B. J., & Sestir, M. A. (2006). Chronic violent video game exposure and desensitization: Behavioral and event-related brain potential data. *Journal of Experimental Social Psychology*, 42, 532–539.
- Basta, A. L., Richmond, T. S., & Wiebe, D. J. (2010). Activity paths, neighborhood boundaries, and environmental exposures during daily activities. *Social Science & Medicine*, 71, 1943–1950.
- Boxer, P., Rowell Huesmann, L., Dubow, E. F., Landau, S. F., Gvirsman, S. D., Shikaki, K., & Ginges, J. (2013). Exposure to violence across the social ecosystem and the development of aggression: A test of ecological theory in the Israeli-Palestinian conflict. *Child Development*, 84, 163–177.
- Boxer, P., & Sloan-Power, E. (2013). Coping with violence: A comprehensive framework and implications for understanding resilience. *Trauma, Violence, & Abuse*, 14(3), 209–221.
- Boxer, P., & Terranova, A. M. (2008). Effects of multiple maltreatment experiences among psychiatrically hospitalized youth. *Child Abuse & Neglect*, 32, 637–647.
- Brandt, R., Ward, C. L., Dawes, A., & Flisher, A. J. (2005). Epidemiological measurement of children's and adolescents' exposure to community violence: Working with the current state of the science. *Clinical Child and Family Psychology Review*, 8, 327–342.
- Buka, S. L., Stichick, T. L., Birdthistle, I., & Earls, F. J. (2001). Youth exposure to violence: Prevalence, risks, and consequences. *American Journal of Orthopsychiatry*, 71, 298–310.
- Byrt, T., Bishop, J., & Carlin, J. B. (1993). Bias, prevalence, and kappa. *Journal of Clinical Epidemiology*, 46, 423–429.
- Clay, C., Ellis, M. A., Amodeo, M., Fassler, I., & Griffin, M. L. (2003). Recruiting a community sample of African American subjects: The nuts and bolts of a successful effort. *Families in Society*, 84, 396–404.
- Federal Bureau of Investigation. (2010). *Offenses known to law enforcement*. Retrieved from <http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/offenses-known-to-law-enforcement>
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Poly-victimization: A neglected component in child victimization. *Child Abuse & Neglect*, 31, 7–26.
- Finkelhor, D., Turner, H. A., Ormrod, R. K., & Hamby, S. L. (2010). Trends in childhood violence and abuse exposure: Evidence from 2 national surveys. *Archives of Pediatrics & Adolescent Medicine*, 164, 238–242.
- Foa, E. B., Johnson, K. M., Feeny, N. C., & Treadwell, K. R. (2001). The child PTSD symptom scale: A preliminary examination of its psychometric properties. *Journal of Clinical Child Psychology*, 30, 376–384.
- 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 and Psychopathology*, 21, 227–259.
- Gaylord-Harden, N. K., Cunningham, J. A., & Zelecek, B. (2011). Effects of exposure to community violence on internalizing symptoms: Does desensitization occur in African American youth? *Journal of Abnormal Child Psychology*, 39, 711–719.
- Guerra, N. G., Huesmann, L. R., & Spindler, A. J. (2003). Community violence exposure, social cognition, and aggression among urban elementary school children. *Child Development*, 74, 1507–1522.
- Guterman, N. B., Cameron, M., & Staller, K. (2000). Definitional and measurement issues in the study of community violence among children and youths. *Journal of Community Psychology*, 28, 571–587.

- Hatchett, B. F., Holmes, K., Duran, D. A., & Davis, C. (2000). African Americans and research participation: The recruitment process. *Journal of Black Studies, 30*, 664–675.
- Holder, E. (2011). *A message from the attorney general on the Defending Childhood Initiative*. Retrieved from <http://blogs.justice.gov/main/archives/1767>
- Huesmann, L. R., & Kirwil, L. (2007). Why observing violence increases the risk of violent behavior in the observer. In D. Flannery (Ed.), *The Cambridge handbook of violent behavior and aggression* (pp. 545–570). Cambridge, United Kingdom: Cambridge University Press.
- Hyde, L., Shaw, D. S., & Moilanen, K. (2010). Developmental precursors of moral disengagement and the role of moral disengagement in the development of antisocial behavior. *Journal of Abnormal Child Psychology, 38*, 197–209.
- Kliewer, W., Lepore, S. J., Farrell, A. D., Allison, K. W., Meyer, A. L., Sullivan, T. N., & Greene, A. Y. (2011). A school-based expressive writing intervention for at-risk urban adolescents' aggressive behavior and emotional lability. *Journal of Clinical Child and Adolescent Psychology, 40*(5), 693–705.
- Kliewer, W., Parrish, K. A., Taylor, K. W., Jackson, K., Walker, J. M., & Shivy, V. A. (2006). Socialization of coping with community violence: Influences of caregiver coaching, modeling, and family context. *Child Development, 77*, 605–623.
- Kruger, D. J. (2008). Verifying the operational definition of neighborhood for the psychosocial impact of structural deterioration. *Journal of Community Psychology, 36*, 53–60.
- Martinez, P., & Richters, J. E. (1993). The NIMH community violence project: II. Children's distress symptoms associated with violence exposure. *Psychiatry, 56*, 22–35.
- Mrug, S., & Windle, M. (2010). Prospective effects of violence exposure across multiple contexts on early adolescents' internalizing and externalizing problems. *Journal of Child Psychology and Psychiatry, 51*, 953–961.
- Ng-Mak, D. S., Salzinger, S., Feldman, R. S., & Stueve, C. A. (2004). Pathologic adaptation to community violence among inner-city youth. *American Journal of Orthopsychiatry, 74*, 196–208.
- Ng-Mak, D. S., Stueve, A., Salzinger, S., & Feldman, R. (2002). Normalization of violence among inner-city youth: A formulation for research. *American Journal of Orthopsychiatry, 72*, 92–101.
- Pynoos, R. S., Frederick, C., Nader, K., Arroyo, W., Steinberg, A., Eth, S., . . . Fairbanks, L. (1987). Life threat and posttraumatic stress in school-age children. *Archives of General Psychiatry, 44*, 1057–1063.
- Reed, P. S., Foley, K. L., Hatch, J., & Mutran, E. J. (2003). Recruitment of older African Americans for survey research: A process evaluation of the community and church-based strategy in The Durham Elders Project. *The Gerontologist, 43*, 52–61.
- Sharkey, P. (2010). The acute effect of local homicides on children's cognitive performance. *Proceedings of the National Academy of Sciences, 107*, 11733–11738.
- Trickett, P. K., Durán, L., & Horn, J. L. (2003). Community violence as it affects child development: Issues of definition. *Clinical Child and Family Psychology Review, 6*, 223–236.
- Weisburd, D., Bushway, S., Lum, C., & Yang, S.-M. (2004). Trajectories of crime at places: A longitudinal study of street segments in the city of Seattle. *Criminology, 42*, 283–322.
- Ybarra, M. L., Diener-West, M., Markow, D., Leaf, P. J., Hamburger, M., & Boxer, P. (2008). Linkages between internet and other media violence with seriously violent behavior by youth. *Pediatrics, 122*, 929–937.

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