The Impact of Violence on Children

Joy D. Osofsky

Joy D. Osofsky, Ph.D., is a professor of public health, psychiatry, and pediatrics at Louisiana State University Health Sciences Center.

Abstract

Existing research on the effects of children's exposure to violence covers a broad range of community, family, and media violence. This research is relevant and useful to an examination of domestic violence in two key ways. First, understanding how exposure to various types of violence affects children and what best enables them to cope can point to important considerations when trying to help children cope with exposure to domestic violence in particular. And second, many families experiencing domestic violence are exposed to other types of violence as well. Exposure to violence on multiple levels can affect the parents' behavior and can compound the effects on children.

This article begins with an overview of the extent of children's exposure to various types of violence, and then examines what is known about the effects of this exposure across the developmental continuum. Key protective factors for children exposed to violence are examined. Research indicates that the most important resource protecting children from the negative effects of exposure to violence is a strong relationship with a competent, caring, positive adult, most often a parent. Yet, when parents are themselves witnesses to or victims of violence, they may have difficulty fulfilling this role. In the final section, directions for future research are discussed.

Increasingly over the past decade, violence in the United States has been characterized as a "public health epidemic."[1] Children are exposed to violence in their communities, in their families, and in the media. According to the *National Summary of Injury Mortality Data*, the homicide rate among young people ages 15 to 24 has more than doubled since 1950, up to a rate of 37 homicides per 100,000 in 1991.[2] Despite the recent declines in crime rates, the homicide rate among males 15 to 24 years old in the United States is 10 times higher than in Canada, 15 times higher than in Australia, and 28 times higher than in France or in Germany.[3] Only in some developing countries in South America such as Colombia and Brazil, and in actual war zones, is there a higher homicide rate among young males than in the United States. Violent behavior, including physical, sexual, and emotional abuse, also occurs frequently within U.S. families. In some areas, more than half of the calls for police assistance are for domestic disturbances.[4]

Finally, the content of American media is the most violent in the world.[5] Both real and manufactured images of violence bombard youths through television, the cinema, and the Internet.

Children's Exposure to Violence

The extent of children's exposure to different types of violence varies. Some children, especially those living in low-income areas, experience "chronic community violence"—that is, frequent and continual exposure to the use of guns, knives, drugs, and random violence in their neighborhoods. It is now rare in urban elementary schools *not* to find children who have been exposed to such negative events. Children interviewed in studies throughout the country tell stories of witnessing violence, including shootings and beatings, as if they were ordinary, everyday events (see Box 1).

Exposure to community violence occurs less frequently for children who do not live in lower socioeconomic neighborhoods, but exposure to family and media violence crosses socioeconomic and cultural boundaries, occurring in all groups within our society.[6] It has been estimated that between 25% and 30% of American women are beaten at least once in the course of intimate relationships.[7] Women are more likely than men to be injured and require medical assistance as a result of physical violence by an intimate partner, and their injuries are likely to be underreported.[8] Estimates of the prevalence of such violence vary, depending on the definitions of abuse and samples studied. One study estimated that more than 3% (approximately 1.8 million) of women were severely assaulted by male partners or cohabitants over the course of a year,[9] while other studies indicate the percentage of women experiencing dating violence, including sexual assault, physical violence, or verbal or emotional abuse, ranges as high as 65%.[10] Estimates show that more than 3.3 million children witness physical and verbal spousal abuse each year, including a range of behaviors from insults and hitting to fatal assaults with guns and knives.[11]

Estimates also indicate that as many as three million children themselves are victims of physical abuse by their parents.[12] In homes where domestic violence occurs, children are physically abused and neglected at a rate 15 times higher than the national average.[4] Several studies have found that in 60% to 75% of families in which a woman is battered, children are also battered.[13] (The article by Fantuzzo and Mohr in this journal issue discusses in greater detail the prevalence and effects of children's exposure to domestic violence.)

Exposure to violence in the media—through television, the cinema, and the Internet—touches virtually every child. Though often quoted, the statistics from the American Psychiatric Association bear repeating: The typical American child watches 28 hours of television a week, and by the age of 18 will have seen 16,000 simulated murders and 200,000 acts of violence.[14] Commercial television for children is 50 to 60 times more violent than prime-time programs for adults, and some cartoons average more than 80 violent acts per hour. With the advent of videocassette sales and rentals of movies, pay-per-view TV, cable TV, video games, and online interactive computer games, many more children and adolescents are exposed to media with violent content than ever before.

Exposure to violence can have significant effects on children during their development and as they form their own intimate relationships in childhood and adulthood. The following section discusses the growing number of studies on the effects of community violence, along with key findings from the literature on the effects of family and media violence on children.

Behavioral and Emotional Effects of Exposure

The number of studies on the impact of children's exposure to violence is still relatively limited due to various difficulties in conducting research on behavioral and emotional effects. For example, such research often poses ethical difficulties if

Box 1

Snapshots of Children's Exposure to Community Violence

In New Haven, Connecticut, a 1992 survey of 6th, 8th, and 10th graders found that very few were able to avoid being exposed to violence. Among these inner-city children, 40% reported witnessing at least one violent crime in the past year, and almost all eighth graders knew someone who had been killed in a violent incident.[1]

On the Southside of Chicago, Illinois, surveys conducted in 1985 found that among 500 elementary school students, one in four had witnessed a shooting and one-third had seen a stabbing.[2] Among 200 high school students, almost two-thirds had seen a shooting and close to one-half had seen a stabbing.[3] Three in five of those who witnessed a shooting or stabbing indicated the incident resulted in a death. More than one-fourth of these young people reported on the survey that they had themselves been victims of severe violence—that is, they had been shot at, suffered a knife attack, or been beaten or mugged.

In Boston, Massachusetts, a 1993 survey of parents at a public hospital indicated 1 out of every 10 children under the age of six had witnessed a shooting or stabbing.[4]

In Washington, D.C., a 1993 survey was conducted with 165 mothers of children, ages 6 to 10, living in a low-income neighborhood characterized by police statistics as having a moderate level of violence—where there might be an occasional murder or violent incident, but such incidents were not a weekly event. The mothers surveyed reported that 32% of their children had been victims of violence, ranging from being chased or beaten to having a gun held to their head. They also reported that 61% of their children in grades one and two, and 72% of their children in grades five and six, had witnessed violence.[5] Interviews directly with the children indicated that the level of exposure may have been even higher.

In New Orleans, Louisiana, a 1993 study gathered interview data from 53 African-American mothers of children, ages 9 to 12, in a low-income neighborhood characterized by police statistics as having a high level of violence—where a murder or more than one violent incident occurred on a weekly basis. The study found that 51% of the children had been victims of, and 91% had been witnesses to, some type of violence.[6] When the children were asked to draw pictures of "what happens" in their neighborhoods, they drew in graphic detail pictures of shootings, drug deals, stabbings, fighting, and funerals, and reported being scared of the violence and of something happening to them.[7]

Endnotes

[1] Marans, S., and Adelman, A. Experiencing violence in a developmental context. In *Children in a violent society.* J.D. Osofsky, ed. New York: Guilford Press, 1997; Marans, S., and Cohen, D. Children and inner-city violence: Strategies for intervention. In *Psychological effects of war and violence on children.* L. Leavitt and N. Fox, eds. Hillsdale, NJ: Lawrence Erlbaum, 1993, pp. 281–302.

[2] Bell, C.C., and Jenkins, E.J. Community violence and children on Chicago's Southside. *Psychiatry* (1993) 56:46–54.

[3] Jenkins, E.J., and Bell, C.C. Exposure and response to community violence among children and adolescents. In *Children in a violent society.* J.D. Osofsky, ed. New York: Guilford Press, 1997; Jenkins, E.J. Violence exposure, psychological distress and risk behaviors in a sample of inner-city youth. In *Trends, risks, and interventions: Proceedings of the Third Annual Spring Symposium of the Homicide Working Group.* R. Block and C. Block, eds. Washington, DC: U.S. Department of Justice, 1995.

[4] Groves, B., Zuckerman, B., Marans, S., and Cohen, D. Silent victims: Children who witness violence. *Journal of the American Medical Association* (1993) 269:262–64.

[5] Richters, J.E., and Martinez, P. The NIMH community violence project: I. Children as victims of and witnesses to violence. *Psychiatry* (1993) 56:7–21; Richters, J.E. Community violence and children's development: Toward a research agenda for the 1990s. *Psychiatry* (1993) 56:3–6.

[6] Osofsky, J.D., Wewers, S., Hann, D.M., and Fick, A.C. Chronic community violence: What is happening to our children? *Psychiatry* (1993) 56:36–45; Fick, A.C., Osofsky, J.D., and Lewis, M.L. Perceptions of violence: Children, parents, and police officers. In *Children in a violent society.* J.D. Osofsky, ed. New York: Guilford Press, 1997.

[7] Lewis, M., Osofsky, J.D., and Moore, M. Violent cities, violent streets: Children draw their neighborhoods. In *Children in a violent society.* J.D. Osofsky, ed. New York: Guilford Press, 1997.

it is to include a comparison or control group of children who are exposed to violence and not provided services to help mitigate this exposure. Also, research in this area often includes the collection of qualitative data through focus groups and interviews to augment the quantitative data on child outcomes and help gauge the impact of community-based interventions. While the qualitative accounting of feelings and events may be the most meaningful way to assess change, the collection of such data from many individuals in the child's world (parents, caregivers, teachers, police officers) takes more time than collecting quantitative measures on children at one time

---

Infants and toddlers who witness violence in their homes or community show excessive irritability, immature behavior, sleep disturbances, emotional distress, fears of being alone, and regression in toileting and language.

---

period, and may be difficult to conduct systematically and yet with sensitivity to the children, families, and the community. In addition, unless researchers are experienced in collecting such data, it may be difficult for them to listen to the children's stories, which are often horrendous.

Despite the limited research in this area, however, much can still be gleaned from existing studies about the effects of children's exposure to violence. The literature on family violence identifies adverse effects on children's physical, cognitive, emotional, and social development. Studies on the effects of exposure to media violence also indicate an increase in negative behaviors. More recently, there has been increasing interest in the effects of violence on children living in urban areas who are exposed to chronic community violence.[15] Parallels have been drawn between children growing up in inner cities in the United States and those living in war zones.[16] In fact, findings from several studies show posttraumatic stress disorder symptoms of children living in "urban war zones" to be similar to the symptoms of children living in actual war zones.[17] As

discussed further below, these symptoms vary by age, but include nightmares, clinginess to parents or caregivers, fear of natural exploring beyond their immediate environment, a numbing of affect, distractibility, intrusive thoughts, and feelings of not belonging. Whether a child's exposure to violence leads to withdrawal or to increased aggression and violence is likely to depend on a variety of factors, including the age at which the trauma occurred, the supports in the environment, and the characteristics of the child.[18]

Developmental Differences in the Effects of Exposure

While children are affected by violence exposure at all ages, less is known about the consequences of exposure at younger ages, especially any long-term consequences. Many people assume that very young children are not affected at all, erroneously believing that they are too young to know or remember what has happened. In fact, however, studies indicate that there are links between exposure to violence and negative behaviors in children across all age ranges.

Infants and Toddlers

Even in the earliest phases of infant and toddler development, existing research indicates there are clear associations between exposure to violence, and emotional and behavioral problems. Infants and toddlers who witness violence either in their homes or in their community show excessive irritability, immature behavior, sleep disturbances, emotional distress, fears of being alone, and regression in toileting and language.[19] Exposure to trauma, especially violence in the family, interferes with a child's normal development of trust and later exploratory behaviors, which lead to the development of autonomy.[20] Recent reports have noted the presence of symptoms in these young children very similar to posttraumatic stress disorder in adults, including repeated reexperiencing of the traumatic event, avoidance, numbing of responsiveness, and increased arousal.[21] For example, in one study, young children were afraid to be near the scene of the violent event they had witnessed, often were afraid to go to sleep or woke up with nightmares, and showed a limited range of emotion in their play.

PHOTO OMITTED

School-Age Children

Several studies support a link between exposure to community violence and symptoms of anxiety, depression, and aggressive behaviors in school-age children living in violent urban neighborhoods.[22] As with preschoolers, school-age children exposed to violence are more likely to show increases in sleep disturbances, and less likely to explore and play freely and to show motivation to master their environment.[23] They often have difficulty paying attention and concentrating because they are distracted by intrusive thoughts. In addition, school-age children are likely to understand more about the intentionality of the violence and worry about what they could have done to prevent or stop it.[24]

In extreme cases of exposure to chronic community violence, school-age children may also exhibit symptoms akin to posttraumatic stress disorder, similar to the symptoms described for infants and toddlers above. In both the study of children ages 6 to 10 in Washington, D.C., and the study of children ages 9 to 12 in New Orleans (see Box 1), children's reports indicated a significant link between the witnessing of violence and such symptoms as nightmares, fears of leaving their homes, anxiety, and a numbing of affect.[25] Forty percent of the mothers in the New Orleans sample and 20% in the Washington, D.C.,

sample said their children were worried about being safe. Similar proportions of the children reported feeling "jumpy" and "scared."

Other studies have reported that school-age children who are exposed to family violence are affected similarly to those exposed to community violence.[26] Such children often show a greater frequency of internalizing (withdrawal, anxiety) and externalizing (aggressiveness, delinquency) behavior problems in comparison to children from nonviolent families. Overall functioning, attitudes, social competence, and school performance are often affected negatively. In addition, studies show that as children get older, those who have been abused and neglected are more likely to perform poorly in school; to commit crimes; and to experience emotional problems, sexual problems, and alcohol/substance abuse.[27]

Studies of school-age children exposed to media violence have also identified adverse effects over time. For example, a longitudinal study of eight-year-old boys that tracked viewing habits and behavior patterns found that those who viewed the most violent programs growing up were the most likely to engage in aggressive and delinquent behavior by the time they were age 18 and serious criminal behavior by age 30.[28] Reports

indicate that exposure to media violence may increase negative behaviors because of the potential for social learning and modeling of inappropriate behaviors by youths.[29] Even when fictionalized, violence that is dramatically portrayed and glamorized is likely to have negative impacts on children and increase their propensity for violence. Despite the differences between fictionalized portrayals of violence and the reality of experiencing violence, researchers have found that real-life events shown in a sensationalized manner may overwhelm or numb the senses.[5]

Adolescents

In contrast to the relatively limited amount of research on younger children, considerable research has been done on adolescent youth violence.[30] Such research indicates

---

The most important protective resource to enable a child to cope with exposure to violence is a strong relationship with a competent, caring, positive adult, most often a parent.

---

that adolescents exposed to violence, particularly those exposed to chronic community violence throughout their lives, tend to show high levels of aggression and acting out, accompanied by anxiety, behavioral problems, school problems, truancy, and revenge seeking.[31]

The more severe effects of violence exposure on adolescents may be related to the fact that they are exposed to much more violence than younger children. In 1995, the U.S. Department of Justice reported that teenagers between the ages of 12 and 15 are victims of crime more than any other age group, and that adolescents of all ages are victims at twice the national average.[32] Although some adolescents who witness community violence may be able to overcome the experience, many others are deeply scarred. For example, some report giving up hope, expecting that they may not live through adolescence or early adulthood.[33] Such chronically traumatized youths often appear deadened to feelings and pain, and show restricted emotional development over time. Alternatively, such

youths may attach themselves to peer groups and gangs as substitute family and incorporate violence as a method of dealing with disputes or frustration.[34]

For example, one study of low-income black urban preteens and teens (children ages 9 to 15) found that those who witnessed or were victims of violence showed symptoms of posttraumatic stress disorder similar to those of soldiers coming back from war, with the distress symptoms increasing according to the number of violent acts witnessed or experienced. Symptoms included distractibility, intrusive and unwanted fears and thoughts, and feelings of not belonging.[35]

Studies of children exposed to war consistently show that separation from family and destruction of important early relationships is one of the most potentially damaging consequences of war for children, but that the children in war zones who are cared for by their own parents or familiar adults suffered far fewer negative effects. Similar findings have been shown in studies of children exposed to other types of violence. In the following section, research identifying the key protective factors that can help children cope with various types of violence in their lives is discussed.

Key Factors Contributing to Resilience

An important, but little understood, area concerns the issue of invulnerability or resilience—that is, the ability to determine which children will experience fewer negative effects in response to exposure to violence. Results from several studies of resilient infants, young children, and youths exposed to community violence consistently identify a small number of crucial protective factors for development: a caring adult, a community safe haven, and a child's own internal resources.[36]

The Crucial Role of Parents

The most important protective resource to enable a child to cope with exposure to violence is a strong relationship with a competent, caring, positive adult, most often a parent.[37] As shown in studies of children exposed to war (and other catastrophic stressors such as premature birth, trauma,

and loss), such events can threaten the development of a child's ability to think and solve problems. But with the support of good parenting by either a parent or other significant adult, a child's cognitive and social development can proceed positively even with adversity.

For example, a study from 1943, which provided some of the earliest reports on children exposed to trauma during World War II, found that despite the potential for severe traumatization for children living in the midst of bombardment, far fewer negative effects occurred among those who were cared for by their own parents or familiar adults where some semblance of order was maintained in their lives.[38] More recently, in 1986, researchers reported that while children who had been exposed to the stress of extreme violence during the war in Cambodia revealed mental health disturbances years after the immediate experience was over, those who did not reside with a family member were most likely to show posttraumatic stress symptoms and other psychiatric symptoms.[39] A similar finding was reported by a psychiatrist working in Uganda during times of conflict.[40]

Similarly, studies of children exposed to chronic community violence have also identified parenting as a key protective factor. For example, one 1996 study of school-age children living in Washington, D.C., neighborhoods with varying levels of violence found that the children who perceived greater support from their families showed less anxiety, even when living in more violent neighborhoods.[41] Case stories of young children exposed to violence reinforce this finding. For example, researchers assessing the stories of children involved in a therapeutic project at Boston City Hospital concluded that parents are the first-line buffers and protectors of children, and that children restabilized most successfully when parents communicate that they understand their children's fears and are establishing a plan of action to deal with the problem.[42]

Benefits of Community Safe Havens

Children living in high-violence areas can benefit from having a protected place in the neighborhood. Such "safe havens" can shield children from exposure to violence and can aid in their resilience.[43] Traditional protected areas for children have included schools, community centers, and churches. Most children spend as much waking time at schools as at home; therefore, schools and teachers have an enormous potential for providing emotional support and nurturing for children exposed to violence. Several studies have shown the positive effects gained when a favorable school climate is provided despite its location in a violent neighborhood.[44] In addition, both

> *Schools and community centers can provide opportunities for children to benefit from the support of peers, which has been shown to be instrumental in reducing anxiety among children exposed to violence.*

schools and community centers can provide opportunities for children to benefit from the support of peers, which has been shown to be instrumental in reducing anxiety among children exposed to violence.[41] Churches not only provide safe meeting places, but also provide belief systems that have been shown to help children cope with trauma.[42]

Characteristics of the Child

Finally, various individual characteristics have been associated with increased resilience among vulnerable children, enabling them to use their own internal resources effectively as well as reach out to others for support when needed. The child's most important personal quality is average or above-average intellectual development with good attention and interpersonal skills.[45] Additional protective factors cited in studies include feelings of self-esteem and self-efficacy, attractiveness to others in both personality and appearance, individual talents, religious affiliations, socioeconomic advantage, opportunities for good schooling and employment, and contact with people and environments that are positive for development. To a large extent, however, the ability of a child to realize the value of such protective factors is linked to the family and institutional supports discussed above.

The Impact of Violence on Parents and Their Capacity to Parent

In neighborhoods with high levels of community violence, as in situations involving domestic violence, parents are often traumatized along with their children. It is crucial to recognize that when experiencing trauma, a parent's ability to play a stable, consistent role in the child's life and, therefore, to support the child's resilience, may be compromised. There are two basic aspects to the problem: (1) parents may be

> *It is crucial to recognize that when experiencing trauma, a parent's ability to play a stable role in the child's life and, therefore, support the child's resilience, may be compromised.*

unable to protect their children and keep them safe, and (2) parents themselves may be numbed, frightened, and depressed, unable to deal with their own trauma and/or grief, and emotionally unavailable for their children. In such situations, strengthening community supports for parents has been shown to be an effective intervention approach, as discussed at the end of this section.

The Inability to Ensure Safety

Protecting children and facilitating their development is a family's most basic function. Although systematic research has not yet been done on the effects of violence exposure on parenting and the caregiving environment, anecdotal reports indicate that parents who are living with chronic community violence frequently describe a sense of helplessness and frustration with their inability to protect their children and keep them safe, even in their own neighborhoods.[46] Parents who are aware that they may not be able to protect their children from violence are likely to feel frustrated and helpless, and to communicate that helplessness and hopelessness to their children. Clinical work with traumatized young children and their families must begin treatment by addressing the issue of whether the child and the family can feel safe. However, for children and parents subjected to

chronic community violence, the continued physical reality of the violent environment cannot be ignored.

In the New Orleans study (see Box 1), the majority (62%) of parents felt that their children were very safe at home, but only 30% felt that they were very safe at school, and only 17% felt that they were very safe walking to and from school and playing in their neighborhood.[47] The children also reported that they felt much safer at home and in school than walking to or from school or playing in their neighborhood. Ninety percent of their parents felt that violence was a serious problem or crisis in their community.

When parents are living in constant fear, they may deny their children normal developmental transitions and the sense of basic trust and security that is the foundation of healthy emotional development.[48] For example, an important psychological aspect of parenting an infant or toddler is being able to provide a "holding environment" in which a parent can both protect a child and allow and encourage appropriate independence.[49] Yet, parents must be able to trust in the safety of their children's independence before encouraging autonomy.[50] For families living with chronic community violence, children's growing independence and normal exploration of their neighborhood may be anything but safe and, therefore, not allowed. When violence occurs in their neighborhood, to their child or to a child they know, parents may become overprotective, hardly allowing their children out of their sight. Under such circumstances, parents may have difficulty behaving in other than a controlling, or even authoritarian, manner.

Being Emotionally Unavailable

Research is just beginning to reveal the magnitude of the problem when children who witness violence live in families who are also traumatized. Families, regardless of their composition, are uniquely structured to provide the attention, nurturing, and safety that children need to grow and develop. But parenting is, at best, a complex process, and in situations of high risk, it is even more so. Poverty, job and family instability, and violence in the environment add immeasurably to the inherent difficulties. For some parents

and children, the stress associated with having to cope with community violence as an everyday event may affect both the parents' ability to parent and the children's capacity to form attachment relationships necessary for their later healthy emotional development.[51]

When parents witness violence or are themselves victims of violence, they are more likely to have difficulty being emotionally available, sensitive, and responsive to their children. They may become depressed and unable to provide for their young children's needs. When children of any age cannot depend on the trust and security that come from caregivers who are emotionally available, they may withdraw and show disorganized behaviors. Because early relationships form the basis for all later relationship experiences, difficult experiences early in life may be problematic for the child's later development.

Parents who have been traumatized by violence exposure must cope with their own trauma before they are able to help their children.[52] Even with heroic efforts, if the parent is sad and anxious, it will be more difficult to respond positively to the smiles and lively facial expressions of a young child. Depressed parents may be more irritable and may talk less often and with less intensity. While understandable, these parental behaviors may lead young children to be less responsive themselves and to feel that they may have done something "bad" to contribute to their parents' behavior.[53]

Mothers in several studies have shared anecdotal data related to their feelings about their children's exposure to community violence and the ways they have tried to handle the problem.[54] As they reiterated numerous examples of violence, a matter-of-fact quality often permeated their reports. Parents' interviews indicate that very early in life, children must learn to deal with loss and to cope with grieving for family members or friends who have been killed.[55] When such events become a part of everyday life, some parents may resort to coping mechanisms that involve a minimization of, or a failure to acknowledge, the consequences of violence.[56] For example, it is not unusual for parents to be

PHOTO OMITTED

unaware of their children's difficulty with concentration and other school problems that frequently follow traumatization from violence exposure.

The Importance of Community Supports

In many urban neighborhoods with high levels of chronic violence, parents may experience additional burdens because the traditional societal protectors of children—including schools, community centers, and churches—are also overwhelmed and are not able to assure safe environments for their children. Yet, supports outside of the family are very important for parents as well as children exposed to violence. For parents, such outside supports can provide opportunities to talk about their own feelings and trauma, which often enables them to be more available to help their children

and to seek help from others in their extended family and community.

Comprehensive approaches, involving multiple agencies and individuals throughout the community, have been found to be useful in creating effective interventions to urban violence. For example, in the Violence Intervention Project, implemented in New Orleans in 1993, community police and schools play important roles in supporting children and families.[57] In many communities, extended families including

Community supports can help children and families feel less isolated and overwhelmed, and more able to cope with the chronic violence in their lives.

grandparents may be important, aided by programs such as Big Brothers and Big Sisters. By providing a network of people who care, such community supports can help children and families feel less isolated and overwhelmed, and more able to cope with the chronic violence in their lives.

Future Research Needs for Children Exposed to Violence

The findings reviewed throughout this article come primarily from the small but growing number of carefully controlled studies on children's exposure to violence completed in the past few years. The findings from these studies are quite consistent and confirm many of the initial impressions of researchers who conducted surveys and clinical studies in the late 1980s and early 1990s.[58] The research work that has been done to date, as well as the careful clinical observations, point to important directions for future research.

First, measures with greater reliability and validity are needed. Research methodology on violence exposure and the effects on children is in its infancy, and relatively few measures are currently available. Some assessment measures, including the Child Behavior Checklist and measures of children's or parents' depressive symptoms, anxiety, or posttraumatic stress disorder

symptoms, have been used widely with the groups most often exposed to violence and are well accepted to measure change in high-risk groups.[59] However, some of the standardized measures that are available to study outcomes and validate the violence exposure measures have been developed on populations coming from different racial and socioeconomic groups than most children exposed to community violence; therefore, their validity may be questionable. An epidemiological approach to collecting data on more diverse populations is needed to establish greater reliability and validity of these measures. Progress is being made in this area, but it will take some time to have well-established and meaningful measures of outcomes following violence exposure.

Second, broad-based epidemiological studies are needed to determine the differential effects of witnessing violence as compared to being victimized by violence, and of being exposed to an acute trauma as compared to chronic, ongoing violence. If possible, the epidemiological work should attempt to distinguish the impact of children's exposure to community violence from the impact of exposure to domestic violence. Samples should include children of different ages, socioeconomic backgrounds, and ethnic or cultural backgrounds. The inclusion of information about violence exposure in national surveys would be useful to professionals who work with children, as well as in planning prevention and intervention strategies.

Third, studies are needed to learn more about the factors that lead to and mitigate violence in high-risk situations.[60] To date, little is known from a research perspective about the processes leading to violent behavior. It is probable that juvenile court judges and probation officers know a great deal about the causes of youth violence from their professional experience and daily exposure to anecdotal reports and qualitative assessments. However, to understand more fully the causes of violent behavior and to develop meaningful prevention and intervention programs, carefully designed studies focused on causes are needed.

Fourth, far too little attention has been given to the potential long-term impact on

PHOTO OMITTED

urban children of living in environments of chronic violence. In clinical work with children under the age of five who have been exposed to chronic violence, concerns have been raised about the children's ability to negotiate developmental transitions in later life.[61] For example, how will young children exposed to severe early trauma cope when they deal with anger and aggression as well as affection toward others, when they struggle with sexuality during adolescence, or when they are confronted with later experiences of death and mortality? This is an area sorely in need of careful research and clinical follow-up studies. Retrospective studies may provide some useful information about the effects of violence exposure on youths, but most study samples to date have been selective—that is, interviewing juvenile offenders or prisoners who have committed violent crimes. This approach does not provide an opportunity to understand the effects on victims and witnesses of violence who do not commit violence themselves. Studies should include prospective longitudinal designs to investigate the long-term psychological effects of exposure to violence on children. Studies should also include children of different ages, socioeconomic backgrounds, and ethnic and cultural backgrounds. Evaluation is needed of the cumulative effects of repeated exposure, the differential effects of severity of exposure, proximity to the event, and the child's familiarity with the victim and/or perpetrator.

Fifth, research is needed on factors that support the resilience of children and buffer them against adverse effects of violence exposure. Significant longitudinal research has been done on determinants of resilience and conditions that serve as protective factors.[62] However, careful longitudinal studies within primarily high-risk inner-city populations, where much of the violence in the United States occurs, have yet to be done. In such studies of the impacts of community violence among high-risk populations, not only must the children be included, but also the family members who are closest to these children. The evidence to date indicates that while the child's individual resources and temperament influence the outcomes of violence exposure to some extent, family support is crucial. The evidence also seems to indicate that more comprehensive approaches that utilize resources from multiple agencies, such as schools, police, and community groups, are most likely to have a positive long-term impact on children exposed to violence. Continued research on mediating factors related to the impact of violence exposure will aid in developing effective prevention efforts.[63]

Finally, many prevention and intervention programs do not currently include evaluation components. In some instances, program staff are resistant to research, are not knowledgeable about how to evaluate programs, or do not make the necessary effort to build the relationships that are needed to carry out this crucial component of a program. In other instances, the intervention program is set up quickly, and it is then difficult to build in an evaluation, especially if staff are not familiar with or oriented toward evaluation. In other programs that are primarily clinical, program staff have neither the knowledge nor the inclination to evaluate the programs. Evaluations should include the development of criteria and assessment tools to help identify those strategies that are most effective. Such evaluations should be conducted across the broad range of intervention programs, including school-based programs, educational initiatives for law enforcement officers, and therapeutic crisis interventions.

In summary, to better understand the effects of children's exposure to violence, it is important to broaden the primary focus on victims and perpetrators to include the important "ripple effects" of the psychological impacts on children who may be witnesses. Law enforcement officers, families, and others frequently overlook the significance of children's exposure to violence. Yet, the negative effects for children exposed to violence in their communities, in their families, and in the media can range from temporary upset, to clear symptoms of post-traumatic stress disorder, to increased aggressive and violent behavior. How a child's long-term development is affected by exposure to different types and multiple levels of violence requires further systematic study.

1. Flannery, D., and Huff, C.R. *Youth violence: Prevention, intervention, and social policy.* Washington, DC: American Psychiatric Press, 1998; Osofsky, J.D., ed. *Children in a violent society.* New York: Guilford Press, 1997; Finkelhor, D., and Dziuba-Leatherman, J. Victimization of children. *American Psychologist* (1994) 49:173–83; Bell, C.C., and Jenkins, E.J. Community violence and children on Chicago's Southside. *Psychiatry* (1993) 56:46–54; Federal Bureau of Investigation. *Uniform Crime Reports for the United States.* Washington, DC: U.S. Government Printing Office, 1992; Fingerhut, L.A., Ingram, D.D., and Feldman, J.J. Firearm homicide among black teenage males in metropolitan counties. *Journal of the American Medical Association* (1992) 267:3054–58; Rosenberg, M.L., O'Carroll, P., and Powell, K. Let's be clear: Violence is a public health problem. *Journal of the American Medical Association* (1992) 267:3071–72; Rosenberg, M.L., and Fenley, M.A. *Violence in America: A public health approach.* New York: Oxford University Press, 1991; Prothrow-Stith, D. *Deadly consequences.* New York: HarperCollins, 1991.

2. Centers for Disease Control and Prevention. *National summary of injury mortality data, 1987–1994.* Atlanta, GA: U.S. Department of Health and Human Services, National Center for Injury Prevention and Control, CDC, November 1996; Rosenberg, M.L. Violence prevention: Integrating public health and criminal justice. Paper presented at the U.S. Attorney's Conference. Washington, DC, January 1994.

3. World Health Organization. *World health statistics annual, 1994.* Geneva, Switzerland: World Health Organization, 1995.

4. Osofsky, J.D. Children who witness domestic violence: The invisible victims. *Social Policy Reports: Society for Research in Child Development* (1995) 9:3.

5. American Academy of Pediatrics, Committee on Communications. Policy statement: Media violence. *Pediatrics* (June 1995) 95:949–51.

6. Murray, J.P. Media violence and youth. In *Children in a violent society.* J.D. Osofsky, ed. New York: Guilford Press, 1997; Huesmann, L.R., and Moise, J. Media violence: A demonstrated public health threat to children. *The Harvard Mental Health Letter* (June 1996) 12:5–7; Eron, L., and Huesmann, L.R. Television as a source of maltreatment of children. *School Psychology Review* (1987) 16:195–202.

7. Pagelow, M.D. *Family violence.* New York: Praeger Publishing, 1984; Straus, M., and Gelles, R., eds. *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families.* New Brunswick, NJ: Transaction Publishers, 1990; Frieze, I.H., and Browne, A. Violence in marriage. In *Family violence.* L. Ohlin and M. Tonry, eds. Chicago: University of Chicago Press, 1989, pp. 163–218.

8. Cascardi, M., Langhinrichsen, J., and Vivian, D. Marital aggression: Impact, injury, and health correlates for husbands and wives. *Archives of Internal Medicine* (1992) 152:1178–84.

9. See note no. 7, Straus and Gelles; Plichta, S. The effects of woman abuse on health care utilization and health status: A literature review. *Women's Health Issues* (1992) 2:154–63.

10. National Center for Injury Prevention and Control, Division of Violence Prevention, Family and Intimate Violence. *Fact sheet on dating violence.* Atlanta, GA: U.S. Department of Health and Human Services, NCIPC, Centers for Disease Control and Prevention, 1998.

11. Jaffe, P.G., Wolfe, D., and Wilson, S. *Children of battered women.* Newbury Park, CA: Sage Publications, 1990; Carlson, B.E. Children's observations of interparental violence. In *Battered women and their families.* A.R. Roberts, ed. New York: Springer Publishing, 1984, pp. 147–67.

12. English, D. The extent and consequences of child maltreatment. *The Future of Children* (Spring 1998) 8,1:39–53.

13. Fantuzzo, J., Boruch, R., Beriama, A., et al. Domestic violence and children: Prevalence and risk in five major U.S. cities. *Journal of the American Academy of Child and Adolescent Psychiatry* (1997) 36:116–22; McKibben, L., DeVos, E., and Newberger, E. Victimization of mothers of abused children: A controlled study. *Pediatrics* (1989) 84:531–35; Bowker, L.H. On the relationship between wife beating and child abuse. In *Feminist perspectives on wife abuse.* K. Yllo and M. Bograd, eds. Newbury Park, CA: Sage Publications, 1988; Straus, M. Measuring intrafamilial conflict and violence: The Conflict Tactics Scales. *Journal of Marriage and Family* (1979) 41:75–88; see note no. 7, Straus and Gelles.

14. American Psychiatric Association. *Psychiatric effects of media violence.* APA fact sheet series. APA Online Public Information. Available online at http://www.psych.org/public_info/media_violence.html. Last modified October 1998.

15. Lynch, M., and Cicchetti, D. An ecological-transactional analysis of children and contexts: The longitudinal interplay among child maltreatment, community violence, and children's symptomatology. *Development and Psychopathology* (1998) 10:235–58; Duncan, D.F. Growing up under the gun: Children and adolescents coping with violent neighborhoods. *The Journal of Primary Prevention* (1996) 16:343–56; Osofsky, J.D., and Fenichel, E., eds. Islands of safety: Assessing and treating young victims of violence. *Zero to Three* (April/May 1996) 16:1–48; Attar, B.K., Guerra, N.G., and Tolan, P.H. Neighborhood disadvantage, stressful life events, and adjustment in urban elementary school children. *Journal of Clinical Child Psychology* (1994) 23:391–400; Taylor, L., Zuckerman, B., Harik, V., and Groves, B. Witnessing violence by young children and their mothers. *Journal of Developmental and Behavioral Pediatrics* (1994) 15:120–23; Cicchetti, D., and Lynch, M. Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children's development. *Psychiatry* (1993) 56:96–118; Fitzpatrick, K.M., and Boldizar, J.P. The prevalence and consequences of exposure to violence among African-American youth. *Journal of the American Academy of Child and Adolescent Psychiatry* (1993) 32:424–30; see note no. 1, Osofsky.

16. Osofsky, J.D., and Fenichel, E., eds. Caring for infants and toddlers in violent environments: Hurt, healing, and hope. *Zero to Three* (December 1993/January 1994) 14:1–48; Leavitt, L.A., and Fox, N.A. *The psychological effects of war and violence on children.* Hillsdale, NJ: Lawrence Erlbaum, 1993; Garbarino, J., Dubrow, N., Kostelny, K., and Pardo, C. *Children in danger: Coping with the consequences of community violence.* San Francisco: Jossey-Bass, 1992; Bell, C.C., and Jenkins, E.J. Traumatic stress and children. *Journal of Health Care for the Poor and Underserved* (1991) 2:175–85.

17. Pynoos, R.S. Traumatic stress and developmental psychopathology in children and adolescents. In *American Psychiatric Press review of psychiatry.* Vol. 12. J.M. Oldham, M.B. Riba, and A. Tasman, eds. Washington, DC: American Psychiatric Press, 1993, pp. 205–38; Nader,

K.O., Pynoos, R.S., Fairbanks, L.A., et al. A preliminary study of PTSD and grief among the children of Kuwait following the Gulf crisis. *British Journal of Clinical Psychology* (1993) 32:407–16; Terr, L. *Too scared to cry.* New York: Harper and Row, 1990; Pynoos, R.S., and Eth, S. Developmental perspectives on psychic trauma in childhood. In *Trauma and its wake.* R.C. Figley, ed. New York: Brunner/Mazel, 1985; see note no. 16, Osofsky and Fenichel; see note no. 16, Garbarino, Dubrow, Kostelny, and Pardo.

18. Research data on outcomes of children's adaptation following exposure to violence are not available; however, reactions are likely to be similar to those of children who suffer early abuse and neglect, and such research has emphasized that early abusive and neglectful experiences may not lead directly to increased aggression and violence. See Widom, K. Does violence beget violence? A critical examination of the literature. *Psychological Bulletin* (1989) 106:3–28.

19. Zeanah, C.Z., and Scheeringa, M. Evaluation of posttraumatic symptomatology in infants and young children exposed to violence. *Zero to Three* (April/May 1996) 16:9–14; Bell, C. Exposure to violence distresses children and may lead to their becoming violent. *Psychiatric News* (January 6, 1995) 6–8, 15; Drell, M., Siegel, C., and Gaensbauer, T. Posttraumatic stress disorders. In *Handbook of infant mental health.* C. Zeanah, ed. New York: The Guilford Press, 1993, pp. 291–304; Jaffe, P., Wilson, S., and Wolfe, D. Promoting changes in attitudes and understanding of conflict resolution among child victims of family violence. *Canadian Journal of Behavior Sciences* (1986) 18:356–66; see note no. 15, Osofsky and Fenichel; see note no. 17, Pynoos.

20. See note no. 16, Osofsky and Fenichel.

21. Osofsky, J.D., Cohen, G., and Drell, M. The effects of trauma on young children: A case of two-year-old twins. *International Journal of Psychoanalysis* (1995) 76:595–607; see note no. 19, Drell, Siegel, and Gaensbauer; see note no. 16, Osofsky and Fenichel.

22. Gorman-Smith, D., and Tolan, P. The role of exposure to community violence and developmental problems among inner-city youth. *Development and Psychopathology* (1998) 10:99–114; Cooley-Quille, M.R., Turner, S.M., and Beidel, D.C. Emotional impact of children's exposure to community violence: A preliminary study. *The American Academy of Child and Adolescent Psychiatry* (1995) 34:1362–68; Schwab-Stone, M.E., Ayers, T.S., Kasprow, W., et al. No safe haven: A study of violence exposure in an urban community. *Journal of the American Academy of Child and Adolescent Psychiatry* (1995) 34:1343–52.

23. Osofsky, J.D. The effects of exposure to violence on young children. *American Psychologist* (September 1995) 50:782–88; see note no. 17, Pynoos.

24. See note no. 19, Drell, Siegel, and Gaensbauer.

25. In the Washington, D.C., study, r=.39, p<.05; in the New Orleans study, r=.42, p<.01. Richters, J.E., and Martinez, P. The NIMH community violence project: I. Children as victims of and witnesses to violence. *Psychiatry* (1993) 56:7–21; Osofsky, J.D., Wewers, S., Hann, D.M., and Fick, A.C. Chronic community violence: What is happening to our children? *Psychiatry* (1993) 56:36–45.

26. See note no. 16, Bell and Jenkins; see note no. 19, Bell.

27. Cicchetti, D., and Toth, S. *Developmental perspectives on trauma: Theory, research, and intervention.* Rochester, NY: University of Rochester Press, 1997; National Research Council, Commission on Behavioral and Social Sciences and Education. *Understanding child abuse and neglect.* Washington, DC: National Academy Press, 1993; see note no. 12, English; see note no. 15, Cicchetti and Lynch.

28. Eron, L. Testimony before the Senate Committee on Commerce, Science, and Transportation, Subcommittee on Communications. Washington, DC, June 2, 1995.

29. Paik, H., and Comstock, G. The effects of television violence on antisocial behavior: A meta-analysis. *Community Resources* (1994) 21:516–46; see note no. 6, Murray; see note no. 6, Huesmann and Moise.

30. Jenkins, E.J., and Bell, C.C. Exposure and response to community violence among children and adolescents. In *Children in a violent society.* J.D. Osofsky, ed. New York: Guilford Press, 1997; see note no. 1, Flannery and Huff.

31. Fonagy, P., Target, M., Steele, M., and Steele, H. The development of violence and crime as it relates to security of attachment. In *Children in a violent society.* J.D. Osofsky, ed. New

York: Guilford Press, 1997; Loeber, R., Wung, P., Keenan, K., et al. Developmental pathways in disruptive child behavior. *Development and Psychopathology* (1993) 5:101–33; Loeber, R., and Dishion, T. Early predictors of male delinquency: A review. *Psychological Bulletin* (1983) 94:68–99; see note no. 30, Jenkins and Bell.

32. Jenkins, E.J. Violence exposure, psychological distress and risk behaviors in a sample of inner-city youth. In *Trends, risks, and interventions: Proceedings of the Third Annual Spring Symposium of the Homicide Working Group.* R. Block and C. Block, eds. Washington, DC: U.S. Department of Justice, 1995, pp. 287–98.

33. Osofsky, J.D. Children who witness domestic violence: The invisible victims. *Social Policy Report* (1995) 9:1–18; see note no. 16, Bell and Jenkins.

34. Parsons, E.R. Inner-city children of trauma: Urban violence traumatic stress response syndrome (U-VTS) and therapists' responses. In *Countertransference in the treatment of PTSD.* J. Wilson and J. Lindy, eds. New York: Guilford Press, 1994, pp. 151–78; see note no. 1, Prothrow-Stith; see note no. 17, Pynoos.

35. Li, X., Howard, D., Stanton, B., et al. Distress symptoms among urban African-American children and adolescents: A psychometric evaluation of the Checklist of Children's Distress Symptoms. *Archives of Pediatrics and Adolescent Medicine* (1998) 152:569–77. Similarly, such symptoms were identified in an evaluation of children in Kuwait during the occupation and the Gulf War. Though the sample was relatively small and selective, the results are informative. Forty-five children ranging in age from 5 to 13 years who were exposed to the horrors of war were interviewed and drew pictures of their experiences. The study found that the majority of the children (62%) reported direct experience with a traumatic event, and many children (at least 20%) experienced the death of a close relative. More than half of the children reported psychological effects of the trauma with repetitive dreams, fears, uncontrollable crying, and/or sleep disturbances. The study also found that girls were more sheltered during the occupation and less likely to witness traumatic events, but that all children felt vulnerable and fearful of future harm or occupation/war. See Garbarino, J. The experience of children in Kuwait: Occupation, war and liberation. *The Child, Youth and Family Services Quarterly* (1991) 14:2.

36. Masten, A.S., Hubbard, J.J., Gest, S.D., et al. Competence in the context of adversity: Pathways to resilience and maladaptation from childhood to late adolescence. *Developmental Psychology* (1999) 1:143–70; Masten, A.S. Resilience in individual development: Successful adaptation despite risk and adversity. In *Educational resilience in inner-city America: Challenges and prospects.* M.C. Wang and E.W. Gordon, eds. Hillsdale, NJ: Lawrence Erlbaum, 1994, pp. 3–25; Masten, A.S., Best, K.M., and Garmezy, N. Resilience and development: Contributions from the study of children who overcame adversity. *Development and Psychopathology* (1990) 2:425–44; Rutter, M. Resilience: Some conceptual considerations. *Contemporary Pediatrics* (1994) 11:36–48; Werner, E. Overcoming the odds. *Developmental and Behavioral Pediatrics* (1994) 15:131–36.

37. Groves, B.M., and Zuckerman, B. Interventions with parents and caregivers of children who are exposed to violence. In *Children in a violent society.* J.D. Osofsky, ed. New York: Guilford Press, 1997; Marans, S., and Cohen, D. Children and inner-city violence: Strategies for intervention. In *Psychological effects of war and violence on children.* L. Leavitt and N. Fox, eds. Hillsdale, NJ: Lawrence Erlbaum, 1993, pp. 281–302; Osofsky, J.D., and Thompson, D. Adaptive and maladaptive parenting: Perspectives on risk and protective factors. In Handbook of early intervention. 2nd ed. J.P. Shonkoff and S.J. Meisels, eds. Cambridge: Cambridge University Press, in press; see note no. 15, Duncan; see note no. 16, Osofsky and Fenichel; see note no. 25, Richters and Martinez.

38. Freud, A., in collaboration with D. Burlingham. Infants without families: Reports on the Hampstead Nurseries, 1939–1945. In *The writings of Anna Freud.* Vol. III. New York: International Universities Press, 1973; Burlingham, D., and Freud, A. *Young children in war time.* London: Allen and Unwin, 1942.

39. Goleman, D. Terror's children: Mending mental wounds. *New York Times*, September 2, 1986, at A15, A19; Kinzie, J.D., Sack, W.H., Angell, R.H., et al. The psychiatric effects of massive trauma on Cambodian children. *Journal of the American Academy of Child Psychiatry* (1986) 25:370–76.

40. Harvard Medical School and Judge Bates Guidance Center, Boston. Personal communication with Gloria Johnson-Powell, Professor of Psychiatry, December 1996.

41. Hill, H.M., Levermore, M., Twaite, J., and Jones, L. Exposure to community violence and social support as predictors of anxiety and social and emotional behavior among African-American children. *Journal of Child and Family Studies* (1996) 5:399–414.

42. See note no. 37, Groves and Zuckerman.

43. See note no. 16, Garbarino, Dubrow, Kostelny, and Pardo.

44. Garmezy, N. Children in poverty: Resilience despite risk. *Psychiatry* (February 1993) 56:127–35.

45. See note no. 37, Marans and Cohen.

46. Osofsky, J.D., and Jackson, B. Parenting in violent environments. *Zero to Three* (December 1993/January 1994) 14:8–11; Lorion, R., and Saltzman, W. Children's exposure to community violence: Following a path from concern to research to action. In *Children and violence.* D. Reiss, J.E. Richters, M. Radke-Yarrow, and D. Scharff, eds. New York: Guilford Press, 1993, pp. 55–65; National Commission on Children. *Speaking of kids.* Washington, DC: National Commission on Children, 1991; see note no. 16, Garbarino, Dubrow, Kostelny, and Pardo; see note no. 25, Osofsky, Wewers, Hann, and Fick; see note no. 25, Richters and Martinez.

47. Fick, A.C., Osofsky, J.D., and Lewis, M.L. Perceptions of violence: Children, parents, and police officers. In *Children in a violent society.* J.D. Osofsky, ed. New York: Guilford Press, 1997.

48. See note no. 19, Drell, Siegel, and Gaensbauer; see note no. 16, Osofsky and Fenichel.

49. Winnicott, D.W. The mother-infant experience of mutuality. In *Parenthood, its psychology and psychopathology.* 1st ed. E.J. Anthony and T. Benedek, eds. Boston: Little Brown, 1970, pp. 245–56.

50. Erikson, E.H. *Childhood and society.* New York: Norton, 1950.

51. See note no. 16, Osofsky and Fenichel.

52. Lewis, M. Trauma reverberates: Psychosocial evaluation of the caregiving environment of young children exposed to violence and traumatic loss. *Zero to Three* (April/May 1996) 16:21–28.

53. See note no. 16, Osofsky and Fenichel.

54. See note no. 25, Osofsky, Wewers, Hann, and Fick; see note no. 25, Richters and Martinez; see note no. 46, Lorion and Saltzman.

55. Thompson, D., Osofsky, J.D., and Heller, S. Evaluation of the Violence Intervention Program. Unpublished manuscript. Louisiana State University Medical Center, 1998; see note no. 46, Osofsky and Jackson.

56. See note no. 47, Fick, Osofsky, and Lewis.

57. Osofsky, J.D. The Violence Intervention Project for families and children. In *Children in a violent society.* J.D. Osofsky, ed. New York: Guilford Press, 1997.

58. Groves, B., Zuckerman, B., Marans, S., and Cohen, D. Silent victims: Children who witness violence. *Journal of the American Medical Association* (1993) 269:262–64; see note no. 1, Bell and Jenkins; see note no. 25, Osofsky, Wewers, Hann, and Fick; see note no. 16, Garbarino, Dubrow, Kostelny, and Pardo; see note no. 16, Bell and Jenkins; see note no. 17, Pynoos; see note no. 25, Richters and Martinez; see note no. 37, Marans and Cohen.

59. Achenbach, T.M. *Manual for the Child Behavior Checklist 4–18 and 1991 Profile.* Burlington, VT: University of Vermont, Department of Psychiatry, 1991; Fox, N.A., and Leavitt, L.A. The violence exposure scale for children. Unpublished manuscript. College Park, MD: University of Maryland, 1995; see note no. 17, Pynoos; see note no. 25, Richters and Martinez.

60. See note no. 1, Bell and Jenkins; see note no. 16, Bell and Jenkins; see note no. 31, Loeber and Dishion; see note no. 31, Loeber, Wung, Keenan, et al.

61. See note no. 16, Osofsky and Fenichel.

62. Masten, A. Resilience in children at risk. In *Research/practice: A publication from the Center for Applied Research and Educational Improvement.* Minneapolis, MN: College of Education and Human Development, University of Minnesota, 1997; see note no. 36, Masten, Hubbard, Gest, et al.; see note no. 36, Masten, Best, and Garmezy.

63. See note no. 37, Osofsky and Thompson.