

The Multiple Dimensions of Child Abuse and Neglect: New Insights into an Old Problem

By Rosemary Chalk, Alison Gibbons, and Harriet J. Scarupa

May 2002

Despite persistent media headlines about extreme cases of child abuse and neglect, the public remains largely uninformed about the developmental status of children affected by this tragic problem. The immediate markers of abuse and neglect are obvious – bruised and battered bodies and, in its most severe form, death. However, research has shown that child abuse and neglect – collectively known as “child maltreatment” – are also associated with a broad array of less visible negative outcomes that may emerge at different stages of children’s lives.

As we report in this Research Brief, these other more hidden consequences can result in long-term health and cognitive effects and developmental delays. Some of these long-term outcomes result from specific injuries and aggressive actions; other effects, equally damaging but often less apparent, originate in the absence of positive interactions between parents and their children and the lack of response to a child’s basic physical and emotional needs.

This Research Brief draws on available data and recent research studies to summarize what is known about these outcomes in several critical areas – physical and mental health; cognitive and educational attainment; and social and behavioral development. To put this information into a larger context, we also briefly sketch out the dimensions and severity of the child maltreatment problem and the demographic characteristics of its victims.

Finally, this brief considers the need to develop reliable indicators to assess and monitor the outcomes of children reported for abuse and neglect. In particular, we suggest that incorporating child well-being indicators into the existing databases of local and state social service agencies may be a feasible and practical way to improve the capacity of these agencies to address the needs of vulnerable children. The use of child well-being indicators could also provide benchmarks to inform public officials and community leaders about the conditions and needs of the populations served by social service agencies, and to monitor their outcomes as programs, policies, and practice guidelines change over time.

THE MAGNITUDE OF THE PROBLEM

Sensational stories of child abuse and neglect have become an all-too-frequent feature of news reports across the country.¹ But these stories may not capture the complexities and scope of child maltreatment.² Nor may they provide sufficient insights into the more routine cases of child abuse and neglect, or the general status of the population of children affected. Research allows us to move beyond the headlines to get a better grasp of this pressing social problem.

At A Glance

Over the past several decades, research studies and surveys have resulted in an expansion of the knowledge base about the fundamental dimensions of the nature and severity of child abuse and neglect. What are some of the things we have learned? Consider these data from 1999 alone:³

- **Large numbers of children are involved.** More than 800,000 children were victims of maltreatment nationwide, according to annual state agency reports. These numbers refer to

children included in substantiated or indicated cases of child abuse and neglect. Substantiated cases are those in which a state agency makes a finding of maltreatment, or the risk of maltreatment; indicated cases are those in which maltreatment is not supported according to state law, but there is reason to suspect that maltreatment either occurred, or there is a risk it could occur.⁴ Not all states, however, differentiate between substantiated and indicated cases. A much larger group (2,974,000 children) was included in initial reports of abuse and neglect that were brought to the attention of child protective agencies but never received further assessment. *It should be kept in mind that the data and research findings presented in this brief are based on cases of child abuse and neglect that are reported to child protective services agencies. Reliable data about the rate of occurrence, or the characteristics, of cases that have not been reported to local authorities are not available.*

- **Child neglect is the most common form of child maltreatment.** More than half (58 percent) of the substantiated cases of child maltreatment involved child neglect. Child physical abuse occurred in about 21.3 percent of these cases. Cases of sexual abuse, although more frequently reported in the media, constituted about one-tenth (11.3 percent) of the total number of substantiated victims. Additionally, about 36 percent were victims of other forms of maltreatment, such as abandonment or threats of harm.⁵
- **The youngest children are at greatest risk of fatality from child maltreatment.** About 1,100 child fatalities were attributed to child maltreatment. The large majority of these cases (86.1 percent) involved children under age six. Almost half (42.6 percent) involved infants under one year.

Responding to the magnitude and severity of the child maltreatment problem is itself a large undertaking, in that:

- **The costs of child welfare services are very high.** Federal and state spending on child welfare programs alone exceeded \$14 billion in 1996, according to one recent

estimate.⁶ More than half of these funds were used for out-of-home placement (\$6.9 billion) or adoption services (\$1 billion). Other treatment and investigative expenses associated with dealing with child abuse and neglect are likewise assumed to be high, such as the annual costs of counseling, physical and mental health care, and other specialized services, as well as expenses for law enforcement and the judicial system.⁷ Additional long-term costs can also occur, such as lost wages, school failure, or health conditions associated with delayed developmental effects as abused and neglected children mature into adolescence.

- **Most local agencies lack adequate resources to protect and serve the needs of children and families that are brought to their attention.** Despite the high level of investment in child protective and child welfare agencies, the social service system is currently overburdened and is unable to care adequately for the large numbers of children who are reported to caseworkers each year. Persistent stresses within the system include high turnover rates for agency staff, large caseloads, frequent litigation and judicial oversight, and repeated calls for reform in research and policy reports.⁸

Statistical Trends

A complicated picture emerges from an examination of child maltreatment statistics over the past two decades:

- **From one perspective, the rate of abuse and neglect appears to be diminishing.** For example, the rate of child victimization from abuse and neglect declined from highs of more than 15 for every 1,000 children in the general population in the early 1990s (1992-1994) to a decade-low rate of 11.8 in 1999.⁹
- **However, the severity of cases associated with reports of abuse and neglect has not changed, and the level of harm may actually have increased.** For example, fatalities from child maltreatment, though rare, remain at relatively stable rates (fluctuating between 1.62 and 1.68 for every 100,000 children) during the period 1995-1999.¹⁰ Moreover, national studies in the period between

1986 and 1993 have shown a significant rise in the incidence of seriously injured children. The estimates of the total number of children who were seriously injured by abuse and neglect in 1993 was 565,000, which is more than four times the number of seriously injured children assessed in child maltreatment reports in 1986 (141,700). Small increases also occurred in less serious categories of injured children, but were not statistically significant. More recent data on the national incidence of seriously injured children associated with child maltreatment reports is not available.¹¹

Demographic Patterns

Information about the age, gender, and ethnicity of victims of children who come to the attention of child protective and child welfare agencies can now be obtained from the National Child Abuse and Neglect Data System (see table below). This table illustrates that maltreatment victimization decreases with age. Also, it shows that females and males are about equally likely to experience maltreatment (although this is not the case for sexual abuse, where females are more likely to be reported as victims). Finally, the data indicate

Profile of Child Maltreatment Victims		
Demographics	Percent ^a	Rate of Victimization ^b (per 1,000)
Age		
0-3 yrs	26.2	13.9
4-7 yrs	25.5	13.0
8-11 yrs	23.1	11.6
12-15 yrs	19.3	10.1
16-17 yrs	5.9	5.9
Gender		
Female	52.0	12.2
Male	48.0	10.8
Race^c		
African-American	26.4	25.2
American Indian/ Alaska Native	1.8	20.1
Asian/Pacific Islander	1.4	4.4
Hispanic	—	12.6
White	54.3	10.6
Other	11.1	—
Unknown	5.1	—

Source: U.S. Department of Health and Human Services (2001). *Child maltreatment 1999*. Washington, DC: U.S. Government Printing Office.

^aAge and race percentages based on Child Trends' tabulations of data from the 1999 National Child Abuse and Neglect Data System (NCANDS), Summary Data Component (SDC).

^bVictimization rates are based on population of children of the same age, gender and race. Age and gender rates are from the NCANDS SDC. Race rates are from the NCANDS DCDC (Detailed Case Data Component), with 20 states reporting.

^cRace percentages do not include Hispanics. Race rates classify any child of Hispanic ethnicity as Hispanic, and are based on the child population of the same categories.

that African Americans have the highest reported rate of child maltreatment victimization (25.2 per thousand children of the same race).

CONSEQUENCES OF CHILD MALTREATMENT

Hundreds of research studies and agency reports have consistently reported negative outcomes from abuse and neglect for many children.¹² Taken together, this evidence suggests that abuse and neglect are associated with both short- and long-term negative consequences for children's physical and mental health, cognitive skills and educational attainment, and social and behavioral development. What is not yet certain, however, is the extent to which these effects are caused by the child's experience with abuse and neglect, the disruptions that often accompany service interventions (such as multiple residential placements for severely maltreated children), or the presence or absence of other factors in the child's developmental experiences.

Health Outcomes

- Various types of brain injuries are associated with childhood maltreatment, particularly when exposure to physical abuse and neglect occurs in the first three years of life.¹³ These injuries include dysfunction, contusions, intracranial and intraocular hemorrhages, atrophy, and changes in the part of the brain linked to memory, emotions, and basic drives.¹⁴ Very young children can suffer particularly damaging consequences, as seen in cases of "shaken baby syndrome."
- Child and adolescent sexual abuse is associated with the risk of sexually transmitted diseases, including HIV, gonorrhea, and syphilis.¹⁵
- Abuse and neglect may be associated with neuromotor handicaps, such as central nervous system damage, physical defects, growth and mental retardation, and speech problems.¹⁶
- Mental health disorders can also result from abuse and neglect. Maltreated children tend to have heightened levels of depression, hopelessness, and low self-esteem.¹⁷ In rare cases (particularly involving cases of sexual abuse), symptoms associated with post-traumatic

stress disorder may occur during childhood or later in adult life.¹⁸

Cognitive and Educational Outcomes

- Some studies find associations between childhood abuse and neglect and language deficits, reduced cognitive functioning,¹⁹ and attention deficit disorders.²⁰ However, other studies do not report significant differences between maltreated children and others on measures of cognitive functioning, language skills, or verbal ability.²¹
- Both neglected and physically abused children tend to do poorly in school, as evidenced by low grades, low standardized test scores, and frequent retention in the same grade, but neglected children fare the worst.²²

Social and Behavioral Outcomes

- Antisocial behavior and physical aggression are two of the most consistent outcomes of physical child abuse,²³ along with fear and anger.²⁴ Self-destructive behavior has been reported less frequently in some studies.²⁵
- Maltreatment can have a negative impact on children's emotional stability and self-regulation, problem solving skills, and the ability to cope with or adapt to new or stressful situations.²⁶ These traits can cause abused and neglected children to have difficulty developing stable attachments to adult caretakers,²⁷ problems developing relationships and trust,²⁸ and behaviors characterized by withdrawal and avoidance.²⁹
- Child sexual abuse has been reported as a risk factor for adolescent pregnancy, although a clear relationship has not been established.³⁰
- Several studies have suggested a link between childhood victimization and substance abuse in later life.³¹ But the evidence for this association is unclear, in that victims of child maltreatment have other problems that may come into play as well.³²
- While the majority of juvenile delinquents were not abused as children and most abused children do not become delinquent, research nonetheless suggests that maltreated children are at increased risk for getting into trouble with the law.^{33, 34}

- Similarly, child maltreatment victims are at an increased risk for running away from home, even though most runaways do not report having been abused.³⁵

Limitations of Existing Research

The research literature on the consequences of child abuse and neglect has several deficiencies:

- **Source of the data.** Our current knowledge about children who have been abused and neglected comes primarily from cases that have already been identified and reported to child protective agencies, rather than population-based samples identified through survey data or community studies. This heavy reliance on administrative records puts greater emphasis on cases that are more likely to come to the attention of social service caseworkers.³⁶
- **Viewpoint of the data.** The tendency to draw conclusions from retrospective reports represents a second limitation of existing studies. These studies identify risk factors that are commonly associated with patterns of abuse and neglect from a child or parent's memory or case records, all three of which may be incomplete and inconsistent.
- **Size of the study samples.** Many of the research studies of child abuse and neglect involve small study samples, sometimes numbering only a few dozen participants. This makes it difficult to draw conclusions for policy and practice. In contrast, national and state-level child well-being indicators are developed from health, educational, and social and behavioral data that are routinely gathered through nationally representative samples.

TOWARD A NEW APPROACH AT MEASUREMENT

Improving the quality of survey instruments so that data about the range of experience with abuse and neglect can be obtained from large population groups is just one of the challenges facing researchers in the child abuse and neglect field. In this section, we discuss these challenges in more detail.

Identifying the Positive as Well as the Negative

By understanding more about the processes that contribute to healthy interactions between

children and their parents, researchers are able to identify certain types of relationships and behaviors that are associated with long-term positive child outcomes.³⁷ These studies suggest that the sources of some of the insidious effects of abuse and neglect may reside in the *absence* of certain parent-child interactions or other positive social behaviors and processes that occur routinely within families that do not experience violence, severe deprivation, or indifference to their children's needs. Yet little is known about the extent to which these everyday positive parent-child and social interactions do or do not occur for children who are reported for maltreatment – because no one bothers to ask.

The presence or absence of certain types of parent-child interactions and other family processes could help explain why not all children who experience abuse and neglect show poor outcomes. The negative effects of abuse and neglect may also be associated with the timing, severity, and duration of the child's experience, as well as the child's relationship with the offender. These effects may be mitigated by the presence of caring adults who respond to the child's needs and who provide opportunities and support for positive development. Knowing more about what it is that caring adults *actually do* in formal and informal settings in responding to the needs of abused and neglected children could help enhance effective service interventions and strengthen child welfare treatment and prevention strategies.

Gaining More Insight into Similarities and Differences

Children who experience abuse and neglect also go to school and live in neighborhoods with other children who may not experience maltreatment but who may share other social and economic characteristics (such as being poor and living in a single-parent household). But within this larger population of children with similar socioeconomic characteristics, we know little about the extent to which maltreated children are at greater risk for poor outcomes than children who have not experienced or been reported for abuse and neglect. A recent study of about 800 children, however, does provide a glimpse.³⁸ The study used combined 1997 and 1999 data from the National Survey of America's Families to compare

the status of children in the child welfare system with those in high-risk families who are outside the system. One of the study's findings was that children in the child welfare system experienced higher levels of emotional and behavioral problems than other high-risk children.

Insights about the relative status of children served by child protective and child welfare agencies require knowing more about the conditions of these children, such as birth weight, height and growth patterns, a child's experience with chronic and acute illness, and a child's school readiness and performance. Information about the presence of social and behavioral problems, as well as indicators of positive development, is also important. Maternal indicators, such as age of mother and level of maternal prenatal care, can provide further insights.

The use of child well-being indicators could allow researchers, service providers, and policy officials to monitor the status of the child welfare population over time. Hundreds of child and family indicators already exist that are used by national and state-level agencies outside the child welfare system.³⁹ These types of indicators of normal and positive development and family functioning could also provide a basis for comparing this population with the general child population, as well as with other vulnerable groups of children, such as those whose families depend on welfare assistance or those whose families experience chronic physical and mental health disorders. In addition, children can be compared on cumulative measures of risk or protective factors to explore how these factors characterize the target population and how they change over time. By documenting the presence or absence of indicators of risk, as well as indicators of positive development, researchers can identify areas of significant difference that require attention to improve the conditions and outcomes of high-risk children.

Facing Up to the Measurement Challenge

Several additional issues complicate the task of developing indicators to measure the health and status of children who are victimized by abuse and neglect:

- Child victims may suffer from multiple types of maltreatment, some of which are known and some of which may never be identified.
- Experiences with similar forms of maltreatment may have differential impacts that are influenced by the conditions of the child (such as age or health) and the home environment (such as family structure or the level of stability or turbulence within the household).
- Many children who are reported for maltreatment are part of households that are marked by other circumstances that threaten parent-child relationships, including poverty and unemployment; chronic physical and mental health disorders; limited access to health care services; alcoholism and substance abuse; and domestic violence.⁴⁰ Separating the impact of the experience with child maltreatment alone from the effects of other risk factors in the child’s family and social environments is a persistently daunting task.
- From a practical point of view, developing child well-being indicators for children who have experienced abuse and neglect requires the collection of data from the children themselves and their caregivers, including parents, teachers, and healthcare providers. Tracking this population of children across multiple service settings, including frequent household moves, involves a commitment of time and effort that is currently not routinely provided in social service agencies.

SUMMARY

Hundreds of thousands of children annually experience abuse and neglect throughout the United States. Children who experience abuse and neglect are at risk for a variety of adverse outcomes as they mature and develop into adolescents and adults. Yet little is known about the routine well-being of this population of children, even those who may be under the long-term supervision of a social services agency.

Public agencies that develop programs and policies for other groups of at-risk children have experimented with the use of child well-being indicators to monitor the status and conditions of different

age groups and to review associations between child outcomes and certain types of child characteristics and family processes. These indicators are providing deeper insights into the positive as well as the negative outcomes associated with different developmental processes within the general child population. Such indicators could improve the ability of social service agencies to track the routine status of the client base that they must serve and to compare similarities and differences between maltreated children and other children living in high-risk conditions.

IMPLICATIONS FOR POLICY AND PRACTICE

The information presented in this *Research Brief* suggests several implications for policy makers and service providers as they address the problem of child abuse and neglect.

One implication is the need to recognize that child maltreatment is often only one part of children’s lives in households that experience poverty, substance abuse, mental health problems, physical disability, stress, or other forms of violence. These other disorders contribute to the conditions of children who are reported for abuse and neglect, and some of these effects may be significant. Enhancing the prospects for healthy development in the lives of maltreated children requires attention to enhancing opportunities for positive family and peer interactions – as well as reducing exposure to violence and neglect.

A second implication is the feasibility of building on what we already know to get a better grasp on how children reported for abuse and neglect are faring. “Reinventing the wheel” may not be necessary since child health and development surveys already contain multiple indicators of child well-being that could be adapted to the data collection efforts of child welfare and child protective service agencies.⁴¹ The challenge that now requires attention is to develop strategies and resources to select among these indicators and incorporate them into the routine data collection processes that support agencies’ casework, decision-making, and program development. The exceptions are positive outcomes and family strengths, where new measures require development.

A third implication is that improvements in the quality of data collection and the assessment of vulnerable children may have the potential to transform treatment and prevention programs. Rather than reacting to problems when they emerge and dealing with them on a one-by-one basis, social service agencies and community leaders could use indicators of well-being to estimate risk, create strategic plans, articulate positive milestones for populations of at-risk children, and use those milestones to identify and build assets that support healthy development. This latter approach requires knowing what specific measures of health, learning, and behavior are appropriate at each stage of a child's development. Agencies would need to reach agreement on the types of indicators that could be used to monitor the status of vulnerable children and determine the scope of effort that would be required to assure that a selected percentage of the child welfare population would be "on track" at each stage. Such knowledge could enable community agencies to establish benchmarks for children in much the same way that health and weight percentiles are developed for growth curves in a pediatrician's office. Indicators suggesting that significant numbers of children are not reaching the desired goals could reveal child and family problems, highlight changes in the needs of the child population, or suggest problems with the scope or quality of services within the community.

CONCLUSION

It is ironic and troubling that a population of children that is at significant risk of adverse outcomes is one for which we have the least amount of information about their general health, educational, social, and behavioral status. Although state and local agencies lack the capacity to conduct in-depth individual developmental assessments of the child abuse and neglect population, more could be done through the use of existing survey measures to determine the levels of risk and routine status within this group of vulnerable children. Better data collection and the use of child-centered measures won't "solve" the problem of child abuse and neglect, but they may provide a more effective planning and assessment tool for public and private agencies and community leaders who want to set positive priorities to address it.

Child Trends is a nonprofit, nonpartisan research center that studies children and families. For additional information on Child Trends, including a complete set of

available *Research Briefs*, please visit our Web site, www.childtrends.org.

Child Trends gratefully acknowledges the Doris Duke Charitable Foundation and the Edna McConnell Clark Foundation for support of our work on child abuse and neglect outcome measures. We also thank the John D. and Catherine T. MacArthur Foundation for its ongoing support of our *Research Brief* series. Additional support for Child Trends' communications efforts is generously provided by the David and Lucile Packard Foundation, the William and Flora Hewlett Foundation, and the Annie E. Casey Foundation.

The authors would also like to thank Kristin Anderson Moore, Ph.D., and Richard Wertheimer, Ph.D., of Child Trends for their contributions to this *Research Brief*. Ying Ying Yuan, Ph.D., of Walter R. McDonald & Associates also graciously served as an external reviewer.

Editor: Harriet J. Scarupa

Endnotes

- ¹See, Kunkel, D., Smith, S., Suding, P., & Biely, E. (2002). *Coverage in context: How thoroughly the news media report five key children's issues*. College Park, MD: Casey Journalism Center on Children and Families. This study finds that although stories of abuse and neglect are one of the most frequently covered children's issues in the media, they rarely contain important contextual information.
- ²Federal and state legislation define specific categories of child maltreatment, including physical and sexual abuse, neglect, emotional abuse, and medical and educational neglect.
- ³Statistics for the three bullets in this section are from U.S. Department of Health and Human Services, Administration on Children, Youth and Families (ACYF). (2001). *Child maltreatment 1999*. Washington, DC: U.S. Government Printing Office.
- ⁴U.S. Department of Health and Human Services, ACYF. (2001).
- ⁵The total percentage in this section is more than 100 because some children have experienced more than one form of maltreatment.
- ⁶Geen, R., Boots, S.W., & Tumlin, K.C. (1999). *The cost of protecting vulnerable children: Understanding federal, state, and local child welfare spending* (Occasional Paper Number 20). Washington, DC: Urban Institute.
- ⁷One advocacy organization estimates that such costs can amount to an additional \$10 billion beyond costs to the child welfare system. See, Fromm, S. (2001). *Total estimated cost of child abuse and neglect in the United States: Statistical evidence*. Chicago, IL: Prevent Child Abuse America. Available online at www.preventchildabuse.org.
- ⁸Malm, K., Bess, R., Leos-Urbel, J., & Geen, R. (2001). *Running to keep in place: The continuing evolution of our nation's child welfare system* (Occasional Paper Number 54). Washington, DC: Urban Institute.
- ⁹U.S. Department of Health and Human Services, ACYF. (2001).
- ¹⁰*Ibid.*
- ¹¹Sedlak, A.J., & Broadhurst, D.D. (1996). *Third national incidence study of child abuse and neglect: Final report*. Washington, DC: U.S. Government Printing Office. Studies that could compare the 1986 and 1993 data with a more recent child maltreatment population in the late 1990s are being designed, but have not yet been conducted. It is uncertain if this pattern of declining caseload, but increasing severity of cases, has continued.
- ¹²English, D.J. (1998). The extent and consequences of child maltreatment. *The Future of Children: Protecting Children from Abuse and Neglect*, 8(1), 39-53. Guterman, N.B. (2001). *Stopping child maltreatment before it starts: Emerging horizons in early home visitation services*. Thousand Oaks: Sage; National Research Council. (1993). *Understanding child abuse and neglect*. Washington, DC: National Academy Press.
- ¹³Guterman. (2001).
- ¹⁴Dykes, L. (1986). The whiplash shaken infant syndrome: What has been learned? *Child Abuse & Neglect*, 10, 211-221; Guterman. (2001).
- ¹⁵National Research Council. (1993).
- ¹⁶Green, A.H., Gaines, R.W., & Sandgrund, A. (1974). Child abuse: Pathological syndrome of family interaction. *American Journal of Psychiatry*, 131(8), 882-886; Martin, H.P., Beezley, P., Conway, E.F., & Kempe, C.H. (1974). The development of abused children. *Advances in Pediatrics*, 21, 25-73; National Research Council. (1993).
- ¹⁷Guterman. (2001); Kaufman, J. (1991). Depressive disorders in maltreated children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 257-265; Kaufman, J., & Cicchetti, D. (1989). The effects of maltreatment on school-aged children's socioemotional development: Assessments in a day camp setting. *Developmental Psychology*, 15, 516-524; Oates, R.K., Forrest, D., & Peacock, A. (1985). Self-esteem of abused children. *Child Abuse and Neglect*, 9, 159-163.
- ¹⁸Wyatt, G.E., Guthrie, D., & Notgrass, C.M. (1992). Differential effects of women's sexual abuse and subsequent sexual revictimization. *Journal of Consulting and Clinical Psychology*, 60(2), 167-173.

- ¹⁹Augoustinos, M. (1987). Developmental effects of child abuse: A number of recent findings. *Child Abuse and Neglect*, 11, 15-27; Fantuzzo, J.W. (1990). Behavioral treatment of the victims of child abuse and neglect. *Behavior Modification*, 14, 316-339; Guterman. (2001); Kolko, D. (1992). Characteristics of child victims of physical violence: Research findings and clinical implications. *Journal of Interpersonal Violence*, 7(2), 244-276.
- ²⁰National Research Council. (1993).
- ²¹Allen, R.E., & Oliver, J.M. (1982). The effects of child maltreatment on language development. *Child Abuse and Neglect*, 6, 299-305; Lynch, M.A., & Roberts, J. (1982). *Consequences of child abuse*. New York: Academic Press.
- ²²Eckenrode, J., Laird, M., & Doris, J. (1991). Maltreatment and social adjustment of school children (Grant 90CA1305, National Center on Child Abuse and Neglect). Washington, DC: U.S. Department of Health and Human Services; Wolfe, D.A., & Mosk, M.D. (1983). Behavioral comparisons of children from abusive and distressed families. *Journal of Consulting and Clinical Psychology*, 51, 702-708.
- ²³Kaufman & Cicchetti. (1989); Main, M., & George, C. (1985). Response of abused and disadvantaged toddlers to distress in agitates: A study in the daycare setting. *Developmental Psychology*, 21, 407-412; National Research Council. (1993); Trickett, P.K., & Kuczynski, L. (1986). Children's misbehaviors and parental discipline strategies in abusive and non-abuse families. *Developmental Psychology*, 22, 115-123; Widom, C.S. (1989a). The cycle of violence. *Science*, 244, 160-166; for aggression, externalizing behavior problems, and later criminal activities, see, Herrenkohl, R., & Herrenkohl, E. (1981). Some antecedents and developmental consequences of child maltreatment. In R. Rizley & D. Cicchetti (Eds.), *New directions for child development, development perspectives on child maltreatment* (Vol. 11, pp. 57-76). San Francisco: Jossey-Bass; Maxfield, M.G., & Widom, C.S. (1996). The cycle of violence: Revisited 6 years later. *Archives of Pediatrics & Adolescent Medicine*, 150(4), 390-395.
- ²⁴Main & George. (1985); National Research Council. (1993).
- ²⁵Gutierrez, S., & Reich, J.A. (1981). A developmental perspective on runaway behavior: Its relationship to child abuse. *Child Abuse*, 60, 89-94; National Research Council. (1993).
- ²⁶Aber, J.L., Allen, J.P., Carlson, V., & Cicchetti, D. (1990). The effects of maltreatment on development during early childhood: Recent studies and their theoretical, clinical and policy implications. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on causes and consequences* (pp. 579-619). New York: Cambridge University Press; Drotar, D. (1992). Prevention of neglect and nonorganic failure to thrive. In D.J. Willis, E.W. Holden, & M. Rosenberg (Eds.), *Prevention of child maltreatment: Developmental and ecological perspectives*. New York: John Wiley; Guterman. (2001).
- ²⁷Cicchetti, D. (1989). How research on child maltreatment has informed the study of child development: Perspectives from developmental psychopathology. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect* (pp. 377-431). New York: Cambridge University Press; Cicchetti, D., & Barnett, D. (1991). Toward the development of a scientific nosology of child maltreatment. In D. Cicchetti & W. Groves (Eds.), *Thinking clearly about psychology: Essays in honor of Paul E. Meehl* (pp. 346-377). Minneapolis: University of Minnesota Press.
- ²⁸Carlson, V., Cicchetti, D., Barnett, D., & Braunwald, K. (1989). Disorganized/disoriented attachment relationships in maltreated infants. *Developmental Psychology*, 25(4), 525-531; Cohn, A.H. (1979). Effective treatment of child abuse and neglect. *Social Work*, 24, 513-519; Dodge, K.A., Pettit, G.S., & Bates, J.E. (1994). Effects of physical maltreatment on the development of peer relations. *Development and Psychopathology*, 6(10), 43-56; Egeland, B., & Sroufe, L.A. (1981). Attachment and early maltreatment. *Child Development*, 52, 44-52; Guterman. (2001); Kaufman & Cicchetti. (1989).
- ²⁹Kaufman & Cicchetti. (1989); National Research Council. (1993).
- ³⁰Bohigan, G.M. (1989, April). Recognition of childhood sexual abuse as a factor in adolescent health issues. Informational report of the Council on Scientific Affairs, American Medical Association.
- ³¹Guterman. (2001); Widom, C.S., & White, H.R. (1997). Problem behaviours in abused and neglected children grown up: Prevalence and co-occurrence of substance abuse, crime, and violence. *Criminal Behaviour & Mental Health*, 7(4), 287-310.
- ³²National Research Council. (1993).
- ³³Ibid.
- ³⁴One study reported that abuse and neglect increased a child's risk for arrest as a teen by more than 50 percent. See, Widom, C.S. (1989b). Child abuse, neglect, and violent criminal behavior. *Criminology*, 27(2), 251-271.
- ³⁵Finkelhor, D., Hotaling, G., & Sedlak, A. (1990). *Missing, abducted, runaway, and throwaway children in America. First report: Numbers and characteristics, national incidence studies, executive summary*. Washington, DC: U.S. Department of Justice; National Research Council. (1993).
- ³⁶Guterman. (2001).
- ³⁷Moore, K.A. (1997). Criteria for indicators of child well-being. In R.M. Hauser, B.V. Brown, & W.R. Prosser (Eds.), *Indicators of children's well-being* (pp. 36-44). New York: Russell Sage Foundation; Moore, K.A., Evans, V.J., Brooks-Gunn, J., & Roth, J. (2001). What are good child outcomes? In A. Thornton (Ed.), *The well-being of children and families: Research and data needs*. Ann Arbor, MI: University of Michigan Press; Moore, K.A., & Halle, T.G. (forthcoming). Preventing problems vs. promoting the positive: What do we want for our children? In S. Hofferth & T. Owens (Eds.), *Children at the millennium: Where have we come from, where are we going?* Advances in Life Course Research series: JAI Press. See also, Child Trends. *The child indicator: The child, youth, and family indicators newsletter*. Quarterly newsletter available online at www.childtrends.org.
- ³⁸Kortenkamp, K., & Ehrle, J. (2002). *The well-being of children involved with the child welfare system: A national overview*. Washington, DC: Urban Institute. It is important to note that this study does not assess the conditions of infants and toddlers in the child welfare system.
- ³⁹See, for example, KIDS COUNT reports from the Annie E. Casey Foundation, available online at www.aecf.org/kidscount/rightstart2002; the indicators studies from note 37; and U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. (2001). *Trends in the well-being of America's children & youth*. Washington, DC: U.S. Government Printing Office.
- ⁴⁰Chalk, R., & King, P. (Eds.). (1998). *Violence in families: Assessing prevention and treatment programs*. Washington, DC: National Academy Press; National Research Council. (1993).
- ⁴¹See, for example, the Child Trends Databank, available online at www.childtrends.databank.org; and the KIDS COUNT surveys from note 39.

© 2002 Child Trends

RETURN POSTAGE GUARANTEED
 Washington, DC 20008
 4301 Connecticut Avenue, NW, Suite 100



NONPROFIT
 U.S. POSTAGE
 PAID
 Permit No. 1897
 Washington, D.C.