

MALTREATMENT (CHILD)

[Archived] The Impact of Child Maltreatment on the Psychosocial Development of Young Children

Seth Pollak, PhD

University of Wisconsin at Madison, USA

December 2004

Introduction

The maltreatment of children is a horrific phenomenon in which young infants and children do not receive the protection, care, nurturance and interactions that are typical of how humans (and many other species) care for their young. It has been well documented that children who experience maltreatment are at very high risk for the emergence of behavioural, emotional and social problems later in life.¹ However, the precise mechanisms linking the experience of maltreatment with the development of these problems are largely unknown. A critical developmental question remains: How is it that adversity or trauma early in life can lead to a range of problems, including depression, aggression, substance abuse, health problems and general unhappiness, years after maltreatment has ended? Asking this question in mechanistic terms, rather than just describing the kinds of problems observed in maltreated children, is likely to help uncover the most effective interventions for these children. The emotional and social

development of maltreated children provides a compelling clue to where to begin looking for answers to these questions.

Subject

Child maltreatment is a significant public health problem. Every year, approximately 13 per 1,000 children in the United States and 10 per 1,000 children in Canada are verified victims of some form of maltreatment.^{2,3} Many more children will experience maltreatment in forms that are more difficult to confirm, such as emotional abuse or neglect. These forms of maltreatment are harder to detect and measure, but also cause tremendous harm.

Problems

Child maltreatment is a disruption in relationships that are supposed to provide protection and nurturance for children. Families are the primary contexts in which young children learn what kinds of social behaviours to expect from others as well as how to interpret and send emotional signals to others. In abusive families, children are exposed to maladaptive forms of emotional communication and behaviour and receive poor models of adaptive self-regulation.

Research Context

Because child maltreatment is not only a mental-health but also a socio-legal problem, families may not be motivated to participate in studies. Therefore, care must be taken to ensure that representative samples of maltreated children are included in research studies, but this must be done in a way that is not coercive. It is also important that child maltreatment be studied as distinct from poverty. For example, some parents may not have the resources to provide their children with certain kinds of nourishment, educational experiences or medical care. In such cases, child maltreatment would be indicated if parents did not do all they could to take advantage of whatever community resources were available to them (e.g. applying for food stamps, using an emergency room). Finally, it is difficult to define child maltreatment, and definitions vary across studies. Some studies may include all children who experienced any kind of traumatic or harmful experience or poor parenting, whereas other studies may focus specifically on children who experienced sexual abuse, physical abuse or neglect, or who witness domestic violence. It is likely that each of these kinds of experiences will have different effects on the developing child. Research projects may also differ on how maltreatment is determined. Some research teams directly ask children and parents about maltreatment, others use police or court

records, and still others follow guidelines established by local child-welfare agencies.

Key Research Questions

Central questions in the study of child maltreatment concern the underlying mechanisms linking early experience with later problems. What is being changed in the individual child as a result of their experience? What exactly about the abusive environment or the experience is responsible for the change? How do the frequency with which maltreatment occurred, the severity of the maltreatment, the specific type of maltreatment and the child's developmental stage at the time of maltreatment relate to different behavioural outcomes? Why is child maltreatment associated with so many different kinds of problems? And most importantly, what can be done to correct and prevent these problems?

Recent Research Results

Children's developing ability to recognize and respond appropriately to emotions is an especially important social skill. However, maltreated children often show unusual patterns of emotional development. These children perform poorly on tasks that measure how well they recognize and express emotions.⁴⁻⁶ Physically abused children, in particular, often display both withdrawal and aggression,⁷⁻⁹ readily attend to and remember cues related to aggression^{10,11} and tend to attribute hostility to others.¹² As might be expected, such constellations of behaviours often lead to interpersonal difficulties for these children.^{13,14}

One proposed mechanism underlying the development of behaviour problems in maltreated children is that traumatic experiences, such as maltreatment, selectively increase children's sensitivity to certain salient emotional cues, especially anger, at the cost of their learning how to read other emotions.¹⁵ For example, physically abused children tend to perceive angry faces as highly salient relative to other emotions; in contrast, neglected children tend to have difficulty differentiating facial expressions of emotion.⁶ Recent studies have suggested that physically abused children display relative increases in brain electrical activity when attending specifically to angry faces.^{10, 16,17}

The extreme stress associated with child maltreatment can also lead to problems in stress and emotion regulation, including depression^{18,19} and substance abuse,²⁰ which likely reflects attempts to help regulate emotional states.²¹ As adults, victims of maltreatment have high rates of anxiety, eating disorders and post-traumatic stress disorder.²²⁻²³ An area of current interest is the effect of

elevated stress hormones, such as cortisol, on the development of brain regions associated with memory storage and retrieval.^{24,25} Although most child victims of maltreatment do not grow up to be criminals, about 30% of these children will engage in criminal behaviours.^{26,27}

Conclusions and Implications

Child maltreatment disrupts the normal course of children's emotional development. Maltreated children are at risk for a wide range of mental health-related problems, including depression, anxiety, substance abuse, criminality and other forms of poorly regulated emotional behaviour. Promising new studies are suggesting insights into how maltreatment affects emotional development by focusing on attention and stress systems in the brain. In the meantime, more work is needed to develop effective interventions for these children.

Although child maltreatment occurs across socioeconomic strata, poverty and environmental stress increase the likelihood that maltreatment will occur. Adults living in poverty often experience high levels of stress and social instability, emotional problems and high levels of substance abuse and/or depression—all of which undermine the ability to parent effectively. Poverty cannot explain all of child maltreatment, however. Maltreating families often lack social connections, including friends, extended family and neighbourhood communities. While such a lack of social connections may reflect the parents' interpersonal difficulties, the net result for children is a limited range of adults who can model prosocial behaviours and fewer opportunities to establish connections with stable adults. This is critical because abusive parents have often had little exposure to good parent role models and lack knowledge about child development, child-rearing strategies, social problem-solving and methods to cope with anger and stress. Research on treatment services for maltreated children and their families has been hindered by our current lack of understanding about what specific processes should be targeted for remediation. New research on neurobiological mechanisms is now underway. Because most current interventions lack compelling empirical data about effectiveness, prevention of child maltreatment holds considerable promise.

References

1. Cicchetti D, Manly JT. Editorial: Operationalizing child maltreatment: Developmental processes and outcomes. *Developmental and Psychopathology* 2001;13(4):755-757.
2. Trocmé N, Wolfe D. *Child maltreatment in Canada: Selected results from the Canadian Incidence Study of Reported Child Abuse and Neglect*. Ottawa, Ontario: Minister of Public Works and Government Services Canada; 2001. Available at: http://www.phac-aspc.gc.ca/ncfv-cnivf/familyviolence/pdfs/nfnts-cmic_e.pdf. Accessed October 25, 2007.

3. Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. *Trends in the well-being of America's children and youth, 2000*. Washington, DC: U.S. Government Printing Office; 2000. Available at: <http://aspe.hhs.gov/hsp/00trends/index.htm>. Accessed October 28, 2004.
4. Camras LA, Ribordy S, Hill J, Martino S, Sachs V, Spaccarelli S, Stefani R. Maternal facial behaviour and the recognition and production of emotional expression by maltreated and nonmaltreated children. *Developmental Psychology* 1990;26(2):304-312.
5. Camras LA, Sachs-Alter E, Ribordy SC. Emotion understanding in maltreated children: Recognition of facial expressions and integration with other emotion cues. In: Lewis M, Sullivan MW, eds. *Emotional development in atypical children*. Hillsdale, NJ: Lawrence Erlbaum Associates; 1996:203-225.
6. Pollak SD, Cicchetti D, Hornung K, Reed A. Recognizing emotion in faces: Developmental effects of child abuse and neglect. *Developmental Psychology* 2000;36(5):679-688.
7. Hoffman-Plotkin D, Twentyman CT. A multimodal assessment of behavioural and cognitive deficits in abused and neglected preschoolers. *Child Development* 1984;55(3):794-802.
8. Jacobson RS, Straker G. Peer group interaction of physically abused children. *Child Abuse & Neglect* 1982;6(3):321-327.
9. Rogosch FA, Cicchetti D, Aber JL. The role of child maltreatment in early deviations in cognitive and affective processing abilities and later peer relationship problems. *Development and Psychopathology* 1995;7(4):591-609.
10. Pollak SD, Tolley-Schell SA. Selective attention to facial emotion in physically abused children. *Journal of Abnormal Psychology* 2003;112(3):323-338.
11. Rieder C, Cicchetti D. Organizational perspective on cognitive control functioning and cognitive-affective balance in maltreated children. *Developmental Psychology* 1989;25(3):382-393.
12. Weiss B, Dodge KA, Bates JE, Pettit GS. Some consequences of early harsh discipline: Child aggression and a maladaptive social information processing style. *Child Development* 1992;63(6):1321-1325.
13. Klimes-Dougan B, Kistner J. Physically abused preschoolers' responses to peers' distress. *Developmental Psychology* 1990;26(4):599-602.
14. Rogosch FA, Cicchetti D, Aber JL. The role of child maltreatment in early deviations in cognitive and affective processing abilities and later peer relationship problems. *Development and Psychopathology* 1995;7(4):591-609.
15. Pollak SD. Experience-dependent affective learning and risk for psychopathology in children. *Annals of the New York Academy of Sciences* 2003;1008:102-111.
16. Pollak SD, Cicchetti D, Klorman R, Brumaghim JT. Cognitive brain event-related potentials and emotion processing in maltreated children. *Child Development* 1997;68(5):773-787.
17. Pollak SD, Klorman R, Thatcher JE, Cicchetti D. P3b reflects maltreated children's reactions to facial displays of emotion. *Psychophysiology* 2001;38(2):267-274.
18. Brown J, Cohen P, Johnson JG, Smailes EM. Childhood abuse and neglect: Specificity and effects on adolescent and young adult depression and suicidality. *Journal of the American Academy of Child and Adolescent Psychiatry* 1999;38(12):1490-1496.
19. Koverola C, Pound J, Herger A, Lytle C. Relationship of child sexual abuse to depression. *Child Abuse & Neglect* 1993;17(3):393-400.
20. Kilpatrick DG, Acierno R, Saunders B, Resnick HS, Best CL, Schnurr PP. Risk factors of adolescent substance abuse and dependence: Data from a national sample. *Journal of Consulting and Clinical Psychology* 2000;68(1):19-30.
21. Kendler KS, Bulik CM, Silberg J, Hetttema JM, Myers J, Prescott CA. Childhood sexual abuse and adult psychiatric and substance use disorders in women: An epidemiological and Cotwin control analysis. *Archives of General Psychiatry* 2000;57(10):953-959.

22. McCloskey LA, Walker M. Posttraumatic stress in children exposed to family violence and single-event trauma. *Journal of the American Academy of Child and Adolescent Psychiatry* 2000;39(1):108-115.
23. Widom CS. Posttraumatic stress disorder in abused and neglected children grown up. *American Journal of Psychiatry* 1999;156(8):1223-1229.
24. De Bellis MD, Keshavan MS, Spencer S, Hall J. N-acetylaspartate concentration in the anterior cingulate of maltreated children and adolescents with PTSD. *American Journal of Psychiatry* 2000;157(7):1175-1177.
25. Heim C, Newport DJ, Heit S, Graham YP, Wilcox M, Bonsall R, Miler AH, Nemeroff CB. Pituitary-adrenal and autonomic responses to stress in women after sexual and physical abuse in childhood. *JAMA - Journal of the American Medical Association* 2000;284(5):592-597.
26. Kaufman J, Zigler EF. The intergenerational transmission of child abuse. In: Cicchetti D, Carlson V, eds. *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect*. New York, NY: Cambridge University Press; 1989:129-150.
27. Widom CS. The cycle of violence. *Science* 1989;244(4901):160-166.