

THOSE DELICATE BRAINS AND TROUBLED MINDS

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The special Spring/Summer 1997 issue of *Newsweek*, one of America's most popular weekly magazines announces that, "Scientists are just now realizing how experiences after birth, rather than something innate, determine the actual wiring of the human brain." Most parents and psychotherapists may find it difficult to believe that such a statement is actually *news*, but then, there has often been a wide gap between what science can prove and common sense allows. As it turns out, at birth the brain's 100 billion or so neurons form more than 50 trillion connections, but in the first months of life, the number of synapses will increase 20 fold, to more than 1,000 trillion. Experience seems to exert its effects by strengthening synapses and synapses that are not used will wither away in a process called "pruning". A growing body of evidence shows that what happens between parents and children plays a huge role, not just in the child's psychological development but in their actual brain development. Talking "baby" talk to infants apparently helps the language centers develop properly and prepares the child for speech. Exposure to music affects spatial-temporal reasoning which is the reasoning underlying math, chess, and engineering. In one recent study published in *Neurological Research*, a group of 3- and 4- year olds given weekly piano lessons. After six months these children scored 34% above average on reasoning skills after having average scores before. Children receiving computer keyboard and mouse lessons, singing lessons, or nothing showed no change.

The downside of all this after-birth brain plasticity is that the developing brain is very susceptible to traumatic experience so that the powerful neurochemicals released as a response to stress appear to be able to produce permanent changes in the very "architecture" of the baby's brain. Dr. Bruce Perry and his colleagues are studying the effects of trauma in childhood and uncovered some disturbing findings. Regions in the cerebral cortex and in the limbic system (responsible for emotion including attachment) are 20-30% smaller in abused children than in normal kids, says Perry; these regions also have fewer synapses. Traumatized children are showing dramatic changes in basic central nervous system reflexes like blood pressure, with a 40% increase in blood pressure readings over the norm and odd responses to orthostatic

changes, indicating impaired brain-stem regulation (Perry 1994, Perry and Pate 1994).

Neuroscientist Megan Gunnar of the University of Minnesota is also looking at the effects of repeated stress on children. In children already traumatized, the slightest stress, the most inchoate fear, unleashes a new surge of stress hormones like cortisol. This causes hyperactivity, anxiety and impulsive behavior. “The kids with the higher cortisol levels score lowest on inhibitory control”, says Dr. Gunnar, “Kids from high-stress environments have problems in attention regulation and self-control” (Begley 1997).

A number of important studies have shown a relationship between child abuse and EEG abnormalities, not entirely related to head injuries. In one recent study of abused children by Ito and Teicher (1993), 55% of the children had EEG abnormalities as compared to 27% of the nonabused children. They also noted a striking association in boys between abnormal EEG's and behavior problems, especially self-destruction.

Dr. Frank Putnam at the National Institute for Mental Health and his research colleagues, are performing a long-term, prospective study of sexually abused girls. His findings are very disturbing. These children are very disturbed and their degree of pathology is increasing over time. And it is not just behavioral problems that afflict these children. The rate of physical symptoms in this population is greatly increased over that of the control group. They visit doctors for colds, influenza and other infections three times as often as other children. They have substantially more stomachaches, head aches, asthma, skin problems than other children – 50-70% more. Their basic physiological measures and responses to neurohormones like cortisol and testosterone are so odd that Dr. Putnam has stated that “the biology of these two populations is so different that you cannot generalize from normal data” (Cole and Putnam, 1992; DeBellis, 1994a, 1994b, 1996; Putnam 1996; Putnam and Trickett, 1993; Trickett and Putnam, 1993).

Lest we, as adults, become too complacent about these findings, a recent study in the *American Journal of Preventive Medicine* illustrates a worrisome connection between adverse childhood events and the leading causes of death in adults. The adverse childhood events or “ACEs” fell into seven categories: psychological, physical or sexual abuse; witnessing violence against mother; living with household members who were substance abusers, mentally ill or suicidal, or ever imprisoned. Seventy percent of the members of a large HMO (health maintenance organization) responded to a survey performed by the researchers. More than half of those surveyed reported at least one, and one-fourth reported two or more categories of adverse childhood experiences. The researchers found that there was a graded relationship between the number of exposure categories a person had experienced and the presence of adult diseases including ischemic heart disease, cancer, chronic lung disease, skeletal

fractures and liver disease. Persons who as children had experienced multiple categories of childhood exposure were more likely to have multiple health risk factors later in life

Studies such as these have enormous implications for public policy. Nearly a quarter of families with children under 3 in the United States live in poverty – most of these families headed by single mothers. In the United States, 50% of mothers with children under 5 are in the workforce; 60% of young children are in daycare. Yet despite this high utilization, there are still no national daycare standards, leaving the most vulnerable members of our community – and our future – open to the potential long-term effects of abandonment, neglect, abuse, and exploitation.

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THE NEGLECT OF NEGLECT

PART II

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EMAIL FROM AMERICA. *PSYCHOTHERAPY REVIEW* 2(6):257-259, JUNE 2000

Although neglect is the most common form of child abuse, it has received far less attention than the other forms of child abuse – physical abuse and sexual abuse. In last month’s column I reviewed what happens to neglected children. This month I want to reflect upon what we know about neglectful parents and families and then touch on what we are learning about adults neglected as children.

Neglectful mothers see themselves as socially unsupported, lonely and isolated, even compared to non-neglectful mothers living in the same neighborhoods with the same socio-economic conditions. Their children likewise tend to become isolated and stigmatized along with their mothers (Polansky et al, 1985). They are more negative in interactions with their children and have fewer positive interactions, rarely engaging their children in play or conversation. At the same time, they demand little from their children and use avoidance strategies in dealing with them. They fail to stimulate their children socially or verbally (Garbarino & Collins,1999). Neglectful parents simply do not know how to parent their children. Almost forty years ago, Young (1964) described neglectful parents as wearing “blindness imposed by their own unsatisfied needs . . . Children themselves, they reacted as children to the demands and obligations of parenthood and of adult life. They had little wish to hurt their children but most of them had small capacity to help them (p. 23, 31)”. These parents did not plan their own lives and the lives of their children tended to drift in an undirected way and when actions were taken they tended to be driven by impulse.

The Minnesota Mother-Child Project was an important longitudinal, prospective study designed to study the development of a sample of high-risk children conducted by Egeland & Erickson (1987). They took 267 children born to first-time mothers who were identified as high-risk for parenting problems due to poverty, youth, low education or lack of support. They divided the group into four kinds of maltreatment: physical abuse, verbal abuse, neglect, and psychological unavailability. The mothers in the neglect group were

irresponsible or incompetent in managing day-to-day child-care activities. They did little to protect their children from danger and had difficulty attending to their children's basic needs. The mothers in the psychologically unavailable group were detached and unresponsive to their children's bid for care and attention and when they did interact with their children, they did so in a perfunctory and mechanical manner, taking no joy in their relationships with their children. They could provide for their children's basic physical needs but were poor at providing any comfort for their children when they were in distress.

Looking more closely at these neglectful mothers, what is clearly evident is an intergenerational cycle of abuse. Among mothers who were abused or neglected when they were children, 40% maltreated their children in the early years of their children's lives and another 30% provided only borderline normal care. Among neglected mothers in particular, seven out of nine maltreated their own children in the first two years of life and the maltreatment was usually neglect (Erickson & Egeland, 1996). Neglectful mothers are more likely to state that their own mothers were less warm and caring than non-neglectful mothers and are more likely to state that they had a less positive relationship with their mothers – and still do (Coohey, 1995). These negligent mothers were more likely to have been separated from a parent during childhood and to have experienced their own parents as being unavailable for affection. They had often experienced psychological, physical and sexual violence at the hands of their family and had been placed in foster care more frequently than non-neglectful mothers. They also experience far more stress in their role as parents and have been exposed to a level of stress more extreme than in the general population. Neglectful mothers do not enjoy their role as a parent and are more depressed than non-neglectful mothers (Éthier, Lacharité & Couture, 1995).

What makes the difference between mothers who were maltreated as children and do abuse or neglect their children and those mothers who were also maltreated and do not abuse their children? Three major factors appear to help explain who was able to break the cycle and who did not. Formerly maltreated mothers who also had a loving, supportive adult in their lives during their childhood seemed to gain from this relationship a different view of themselves and others, the possibility for doing things differently. If a formerly maltreated mother had a supportive partner in her life when she became a parent, she was less likely to maltreat her own children. And mothers who had been maltreated managed to become more effective parents if they received therapeutic intervention that enabled them to come to some resolution of their earlier issues and achieve greater emotional maturity (Erickson & Egeland, 1996).

What do we know about neglected children affects adult behavior? Neglected children come to expect neglect from relationships so that they shut down and

stop seeking contact, even though they suffer from overwhelming loneliness. They expect not to get what they need from others and often they stop even trying to solicit care and warmth from others, preferring nonhuman animal contact or interaction at a distance. Having failed to receive their parents' encouragement and support for learning, problem-resolution and accomplishment, they expect not to be effective and successful in tasks and so they often do not succeed. Below the surface, however, they have powerful dependency needs that can be overwhelming. The affective arousal and anxiety that accompanies these unmet needs makes it difficult to concentrate or to remain task-oriented (Crossen-Tower, 1999).

In a study looking at abuse and neglect experiences in a college sample, the strongest relationship in the analyses of the study was between retrospective reports of parental emotional neglect and self-reported social isolation and loneliness. This was found to be consistent with the finding that neglected children tend to be less socially competent than their peers and more socially isolated than either their abused or nonmaltreated peers. Most research on neglect has focused on mothers, but one study also looked at the differential impact of paternal neglect. Higher levels of paternal emotional neglect predicted higher levels of loneliness, and neglect combined with physical abuse was shown to significantly lower self-esteem, in the sons. Maternal maltreatment of boys did not have the same extensive effect as did paternal abuse and neglect. For women, maltreatment from either parent had negative results (Loos & Alexander, 1997).

Most of the research performed thus far on neglect has been done on children already designated as neglected by child protective services. For a report to be filed, investigated and found to be accurate, the omissions of care must be severe. It is physical neglect that is most obvious to people in a position to make such a report, and most reports are against impoverished families. What often goes unrecognized is emotional neglect among families from higher socioeconomic classes and frequently the only thing that brings it to our attention is when an adult patient shows up in a therapist's office asking for help or when someone in our own personal sphere shows the signs of having been neglected as a child.

Since most of the patients that we treat on our inpatient unit have been abused as children, the rate of associated neglect of all kinds is extremely high. Most of them do not come from situations of extreme poverty and yet they give clear examples of emotional, physical and sexual abuse as well as emotional neglect and even physical neglect. They describe how difficult it is to grieve the loss of the family you never had, illustrating how difficult it is to work through losses that are due to omission rather than commission (Bloom, in press). But perhaps even more surprising is what happened when I began talking to my friends and colleagues about the issue of neglect.

Rachel is a woman I know who saw me reading a book about neglected children and picking it up, remarked "I was neglected as a kid. You could say I was raised by wolves". She had not been physically or sexually abused as a child, but her mother was part of the avant garde set in New York and had left her children to fend for themselves under the guise that this would promote their liberation. In reality, it simply left Rachel feeling unwanted, uncared for, and unloved, although she became an unusually competent child at an early age. Her unsolicited comments on the subject were striking to me and consistent with what we know thus far about the impact of neglect on adults who were neglected as children. She talked about always being afraid that something bad was going to happen and afraid of people. She told me that she had not recognized the neglect as a child but only as an adult when she saw the care that other people had received as children that she had not. Most importantly, perhaps, she revealed that, "I am unable to view life as a gift, but instead experience it as a burden I didn't ask for".

I talked to another professional colleague, Gail, about this issue of neglect. And she described to me her lifelong feeling of invisibility as a result of being emotionally neglected, of feeling like other people were simply more "real" in a peculiar way than she is. Now in her 60's, by all accounts very successful in her professional life, she tells me that she has had difficulty in establishing intimate relationships and lives with fear about being close to others, haunted by a loneliness that seems to come with the territory of emotional neglect. Benjamin, neglected as a child by two parents who were busy with their own careers, has lived as an adult struggling against an omnipresent anxiety that he has tried to treat with both alcohol and drugs. He has difficulty being able to turn to other people for comfort or support and is haunted by a pervasive loneliness, while always feeling more comfortable and safer alone. Despite his difficulties, he has had a successful professional career, but wonders now what he could have done if his self-esteem had not been so negatively impacted by his failure to get his father's attention or approval. Lillian describes how difficult it has been for her to organize tasks, focus attention and maintain concentration, even though she too is extremely intelligent, successful, and competent. She attributes this to never learning how to accomplish these tasks as a kid. Her parents never helped her with her homework, tended never to plan but to act on impulse themselves, and expected her to accomplish complex tasks without ever showing her how to do things or guiding her work. Neither mother nor father was emotionally available to her as a child and she had to learn to fend for herself, turning largely to animals for comfort. As an adult looking back, she recognizes that as a result of the emotional neglect she experienced, everything has been harder for her. Although she has accomplished a great deal, she wonders what her life would now be like if she hadn't had to take the long way around. She too describes how difficult it has

been to feel safe with other people, to learn how to put her feelings into a language form and be able to share them safely with others.

In truth, as a society we have serious difficulty in really confronting the issue of child abuse and neglect because to do so means we have to confront the endemic nature of child maltreatment. Here in the U.S., we know that home visitation programs are effective in preventing child abuse and therefore preventing many of the long-term effects of child maltreatment. These programs are relatively low-cost and involve using closely supervised paraprofessionals as intervention agents with high-risk families to provide support and assistance to parents with skill development training as well as community liaison services over an extended period of time (Holden and Nabors, 1999). There have even been fifteen-year follow-up studies showing marked differences between the families that receive this support and similar families that do not (Olds et al, 1997). Nonetheless, given their efficacy and effectiveness, these programs have not proliferated at the rate expected (Leventhal, 1996). To really take on the issue of child maltreatment means breaking through the social denial that we are all awash in, not just the most damaged among us. It means looking at the priorities in a socioeconomic system that encourages profit over people and fails to support parenting, families, and children.

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