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## Violence

### Effects of Parent's Previous Trauma on Currently Traumatized Children

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Our parental inheritance is much more than just the genes. Every cell in the body is impregnated with consciousness that is laden with the thought forms and imprints passed down from generation to generation.

GRISGAM, 1988, p. 37

The belief that the actions or experiences of one family member are transmitted intergenerationally predates written history and is multicultural. It has been handed down for many centuries among Japanese cultures (Motoyama, 1992) as well as specific Native American tribes (Nahwegahbow, 1995). It can be found in both Eastern and Western religious traditions. For example, the pre-Vedic verbal tradition in India describes the transmission of positive effects (Ledgerwood, 1979). The writings, dated 15th century B.C., sacred to both the Jewish and the Christian traditions (The Holy Bible, Exodus, 34:7, Numbers 14:18) as well as Talmudic writings in the Jewish tradition from the fourth to fifth century C.E. (A.D.) (Talmud, Sota 34a) depict the transmission of negative effects. This belief has found its way into "New Age" psychological and physical healing practices that are often based upon the ancient healing and spiritual traditions of several cultures (see Grisgam, 1988, opening quotation).

The intergenerational transmission of trauma has been investigated for children of Holocaust survivors, traumatized war veterans, and previously abused parents. Investigators have disagreed about the statistically measurable existence of a *direct* effect of a parent's trauma upon the children (see Studies of Children of Traumatized Parents section). This chapter examines the association of a parent's previous trauma with trauma in children exposed to a current traumatic event. It is a clinical case examination of two groups of children, including a subsample of children exposed to a sniper attack in south-central Los Angeles, California, in 1984, and a sample of children exposed to a hostage taking and suicide in Orange County, California, in 1987.

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## THE TRANSMISSION OF TRAUMA

The transmission of parental trauma to a child has been explained in a variety of ways through (1) overt communications; (2) overt behaviors; (3) covert or metacommunications, subliminally; and/or (4) genetically or biochemically. Whether transmission of traumatic themes and phenomena is overt or covert may be related to the nature of traumatic memories (e.g., explicit vs. implicit memory). Explicit memory is overt, conscious, and basically factual. Implicit memory is more covert and is described as unconscious or preconscious (i.e., overt awareness of the memories is lacking). The overt transmission of trauma may include verbal prescriptions (e.g., teaching children to expect trauma, the sense of belonging to a violent community), modeling (e.g., modeling violent interactions or helplessness), or parent's posttraumatic violent behaviors (e.g., intrafamilial abuse). Other forms of transmission are also discussed.

### Covert Transmission

It has been hypothesized that life experiences or their effects are covertly transmitted from one generation to subsequent generations by the nonverbal communication of intense unresolved personal conflicts, the handing down of family myths and beliefs, and the learning of life scripts. Covert transmission of trauma includes the communication of ideas, themes, and experiences without conscious awareness. This process may include issues of identification, learning, self-esteem, and mental organization. The following are a few of the theories that seek to explain the covert conveyance of repeated themes.

For children, the study of transgenerational trauma has included a discussion of intergenerationally repeated child maltreatment. Although a number of studies have observed that abusing parents report a high rate of emotional or physical maltreatment in their own childhoods (Curtis, 1963; Wasserman, 1973), the studies often do not have access to previously abused parents who are now providing adequate care for their children. Thus the maltreated-maltreating cycle may be overreported (Zeanah & Zeanah, 1989). Learning, identification, internalization, inadequate self-esteem, and impaired impulse control as a result of trauma have all been implied or discussed as explanations of the transgenerational repetition of abuse. According to Zeanah and Zeanah (1989), attachment theory (patterns of attachment to and intimately relating with others; Bowlby, 1969/1982, 1973, 1980) suggests shifting the focus to organizing themes of the parent-child relationship and their associated internal working models. In this theory, dynamic mental representations of self and others (working models), maintained largely out of awareness, guide appraisals of and responses to others. For example, mothers who are angry and punitive have toddlers who are angry and noncompliant. These toddlers have apparently internalized their parent's aggression and learned both the punitive and provocative roles of the relationship. Thus, the organizing themes of the relationship are transmitted across generations (Zeanah & Zeanah, 1989).

Szurek, in 1942, and Johnson and Szurek (1952) discussed the "superego lacunae" in relationship to adolescent delinquent behaviors. Singer (1974) summarized their theory as follows: "Specific areas of antisocial aggressive and sexual behavior coincid[ing] with the specific unconscious areas in the parents, usually the mother, that were forbidden, unacceptable and, although highly cathected, were totally unintegrated and usually unexpressed by the parent" (p. 795). These suppressed areas in the parent resulted in an unconscious dialogue between parent and child, via covert messages, characterized by an ongoing reciprocal system of message and countermessage. The unconscious sanctions for behaviors or experiences had

more power than the conscious, overt messages to stop the behaviors or avoid the experiences. These metacommunications that encouraged acting out included, for example, the mother always expecting the worst. "Superego lacunae" was used to explain the behaviors of a suddenly school-phobic daughter. The family had been referred for treatment because the son had committed a minor crime; the mother also sought help for her daughter. The daughter, although unaware of her mother's childhood sexual trauma, became school-phobic when she reached the age the mother had been when first molested.

Feinstein and Krippner (1988) discuss the mythology passed down through a family, laden with the disappointments and hopes of prior generations. Genetics and cultural mythology are amalgamated into a unique "mythic" framework that shapes personal development. A personal myth is the constellation of feelings, beliefs, and images that is organized around a core theme and addresses one of the traditional functions of mythology. According to Campbell (1968), these functions, include the (1) urge to comprehend the natural world in a meaningful way; (2) search for a pathway through the succeeding epochs of life; (3) need for secure and fulfilling relationships within a community; and (4) longing to know one's part within the universe. Through these personal myths, individuals understand the present and find guidance for the future. Personal myths evolve as they are passed from one generation to the next. Similarly, Armsworth (1993) discussed the transgenerational transmission of trauma in terms of Eric Berne's "script" theory, which proposes that children learn life scripts from the opposite-sex parent and learn how to implement them from the same-sex parent.

"Self-fulfilling prophecy" is a commonly used term to denote that our strongly held beliefs often become reality (whether because of our actions or because of the actions we elicit from others). By this same process, commonly held familial or cultural beliefs may contribute to the phenomenon of transgenerational trauma as well, and thus provide a long history of anecdotal evidence that the parents' actions and experiences affect the lives of their children.

### **Genetic or Biochemical Transmission**

Studies of both animals and humans have provided evidence that characteristics affecting life circumstances are genetically or biochemically transmitted from one generation to another. In an extensive study of mice in the 1950s, Calhoun (May, 1995) observed parent mice who, under stress, became abusive (e.g., biting the babies' necks or tails). He found that the sequence of experiences through sequential generations altered the behavior toward increasing pathology. Subsequent generations of mice became fixed at a maturation level of 21 days for males and 45 days for females, and never developed the capacity to mate or reproduce. No change was observed after they were returned to a normal situation.

In a study of Rhesus monkeys, Suomi (1995; see also chapter 36, this volume) reported that certain monkeys had higher adrenocorticotrophic hormone (ACTH) and cortisol rates when placed in stress situations. These more reactive monkeys became depressed and withdrawn rather than adjusting over time to the normal parental separation during breeding seasons. Reactive male rhesus monkeys consistently produced offspring who were high reactors and had higher ACTH and cortisol levels. These patterns tended to persist from infancy to adulthood. Male monkeys who, at adolescence, must leave the troop of monkeys into which they were born and find another troop, were more successful if they were not among the high reactive group. In a comparison of female rhesus offspring placed with foster mothers during early life and maturation, Suomi observed that when monoamine metabolite levels were measured after breeding separation, daughters' monoamine metabolite rates were closer to their natural mothers' than to their foster mothers' rates. High reactors were more likely to neglect or abuse their offspring.

In a study of spine–meningeal system adaptive holding patterns, Ward (1990) suggested that psychogenetic patterns were inherited and could be traced back up to five generations (Ward, Ward, & Behan, 1993). Ward (1990) also hypothesized that every new trauma, through the fetus, becomes an inherited dysfunctional psychogenetic experience. Studying the histories of preceding generations (a history sometimes unknown to the patient), Ward related later physical traumas (e.g., debilitation from a car accident) to, for example, a murdering grandparent, the near-death abuse of mother by father during pregnancy, or a grandparent's suicide. He concluded that degenerative ailments such as muscular dystrophy, myasthenia gravis, multiple sclerosis, cystic fibrosis, and cerebral palsy could be traced back to fetal, parental, or grandparental traumatic experiences such as abandonment, suicide, or being unwanted (Ward, 1993; personal communication, June 1995).

### STUDIES OF CHILDREN OF TRAUMATIZED PARENTS

A number of studies have examined the effects upon children of a parent's traumatic experience. Studies of the children of Holocaust survivors have sometimes disagreed about the etiology or existence of "effects" in children of survivors. After reviewing these studies, Solkoff (1992) concluded that clinical and anecdotal data point to psychopathology in the adjustment of children of survivors, whereas more methodologically sophisticated studies generally conclude that children of survivors are not substantially different from other children. Solkoff suggested that immigrant status may be as important as the Holocaust experience in determining differences in psychological adjustment among offspring.

Clinical studies have enumerated a variety of psychological difficulties in children of Holocaust survivors (Danieli, 1981; Freyburg, 1980; Klein & Kogan, 1986). Cited in association with these psychological effects were parenting methods characterized as overprotective, overcontrolling, and treating children like highly valued possessions (Freyburg, 1980), and parental qualities such as obsession with anxieties and fears, ambivalence, and disbelief in their children's ego strength (Klein & Kogan, 1986). In addition to issues of psychological adjustment, researchers have discussed whether or not children exhibit secondary trauma without direct exposure to their parents' traumatic experiences. Like Klein and Kogan, Barocas and Barocas (1979) reported, in a clinical sample of survivors' offspring, intrusive images and nightmares of their parents' Holocaust experiences. In order to separate the effect of a parent's posttraumatic behavior from the impact of the parent's traumatic experience, Dan (1995) examined the children (ages 12–17) of Vietnam veterans diagnosed with posttraumatic stress disorder (PTSD) and associated disorders, and children of veterans without any combat experience during the Vietnam era (with no PTSD). Both groups were substance abusing, so that differences in the children could not be attributed to any family disorganization and other effects of the substance abuse itself. Both the children of substance-abusing fathers with no PTSD and the children of substance-abusing combat-veteran fathers with PTSD had more trauma symptoms than normal children. However, most of these children had a subset of DSM-IV PTSD symptoms rather than PTSD. Children with moderate to severe PTSD levels generally had mitigating factors (e.g., high levels of violence in the home), which might explain their increased symptoms. Children of PTSD fathers had more conflict in their families.

Studies have also examined increased vulnerability during exposure to a traumatic experience as a result of a parent's previous trauma. Solomon, Moshe, and Mikulincer (1988) found that 1, 2, and 3 years after participation in the 1982 war in Lebanon, Israeli combat veterans whose parents were Holocaust survivors had higher rates of PTSD and greater numbers of

PTSD symptoms than their combat-veteran counterparts whose parents were not survivors of the Holocaust. The decrease in PTSD symptoms over time was greater for soldiers with non-survivor parents.

## CHILDHOOD TRAUMATIC EVENTS AND PARENT'S PREVIOUS TRAUMA

This chapter primarily examines the issue of vulnerability in children whose parents have had traumatic experiences. Below are the results of this examination for two groups of children who were exposed to a traumatic experience as a group.

### Sniper Attack

In February 1984, a man opened fire on a crowded elementary school playground. One fifth-grade child and one passerby were killed and more than 14 others were injured, including one school staff member. Children witnessed as bullets went through one side of a fifth-grade girl, exiting the other side with lung and heart tissue. The passerby was cut open across his abdomen by the same automatic gunfire, and intestines were emerging from his abdomen. One child sustained severe intestinal and other abdominal injuries, another lost the use of his hand, and still another child had a pellet lodged in her throat. The sniper appeared to be shooting at any moving target, and many children were pinned down on the playground or behind nearby barriers that protected them from the sniper's sight. Children looking out through windows on the sniper side of the school saw severe, bloody injuries through the window or were frightened by bullets breaking through windows. Children in classrooms on the other side of the school saw their teachers tape paper over windows and/or were ordered to hide in closets or under desks. They feared gang members were attacking the school and would enter to kill them.

One month after the sniper attack, 77% of children present on the playground under direct attack and 67% of children in the school had moderate to severe PTSD. In contrast, 74% of children who had already gone home at the time of the attack and 83% of children on a 3-week vacation from this year-round school had mild to no PTSD. Within each exposure level, children who knew the deceased classmate had significantly more symptoms of PTSD (Pynoos *et al.*, 1987). Fourteen months later, children with greater exposure to the shooting continued to have significantly more symptoms and significantly greater severity of traumatic reactions. Children with lesser exposure had higher trauma scores if they knew the child who was killed or if they reported experiencing guilt feelings. Grief scores were associated with greater acquaintance with the deceased classmate, independent of exposure to the sniper attack. A child's previous trauma did not significantly affect trauma scores (Nader, Pynoos, Fairbanks, & Frederick, 1990).

### Methods

In order to examine the effects of a parent's previous trauma on children exposed to traumatic events, the acute-phase clinical diagnoses and Childhood PTSD Parent Inventory (CPTSD-PI; Nader, 1984) of 92 children were reexamined. Twelve children were omitted from this review because 10 were missing clinician's diagnoses and 2 were missing data regarding theirs and their parents' previous traumas (8 exposed, 4 not exposed). Of the remaining 80 children, 48 were exposed (on the playground or in the school) and 32 were not exposed (on the way home, at home, out of the area) to the shooting.

All of the children on the playground during the sniper attack (estimated between 60 and 90) were invited to receive a clinical diagnostic interview with one of six members of the UCLA Trauma Team. A distinction was made between symptoms related to the sniper attack and those related to a previous experience. The unexposed group included 11 children randomly selected from the children unexposed to the shooting who had been interviewed in their classrooms using the Childhood Posttraumatic Stress Reaction Index (Frederick, Pynoos, & Nader, 1992) (12 were invited; one refused), 5 at-risk unexposed children (4 previous conduct disturbances and 1 depression), and 16 unexposed siblings of children in the exposed group. Because of sampling method and size, this particular review must be considered a clinical, descriptive examination of children.

## Results

**Subjects.** The sniper attack was an event that traumatically affected children primarily as a result of exposure to a threat to life and the witnessing of injury or death (Nader *et al.*, 1990; Pynoos *et al.*, 1987). Fifty percent (24) of the children in this sample who were exposed to the attack had parents with previous traumas and 50% (24) had parents with no previous trauma. Of the 32 unexposed children, 19 (59%) had a parent with prior trauma(s) and 13 (41%) had parents with no prior traumas. For the total group, 43 (54%) of the children's parents had experienced a previous trauma and 37 (46%) children's parents had no previous trauma (Table 1).

**Parent's Previous traumas and the Effects of the Sniper Attack.** Although exposure to the attack was highly correlated with traumatic response—regardless of specific other factors such as grief or the child's previous trauma (Pynoos *et al.*, 1987)—all of the unexposed children with PTSD had parents with previous traumas. None of the unexposed children in this sample whose parents were free of previous trauma had PTSD. The five children in this sample who, although exposed, had no PTSD (including those with selected trauma symptoms or aggression), were in the school building rather than on the playground; they reported no prior traumas, and their parents reported no prior traumas.

Having a parent with a previous trauma was associated with the presence of symptoms, following the sniper attack, related to this or another stressful experience. All 8 (100%) of the unexposed children with no PTSD, no selected symptoms of PTSD, and no aggression in response to this sniper attack, whose parents had a previous trauma, were reexperiencing the

**Table 1. Parent's Previous Trauma, Sniper Attack**

		Parent trauma N = 24	No parent trauma N = 13
PTSD	Exposed	0	19
	Not exposed	3	0
No PTSD	Exposed	0	2
	Not exposed	8	10
Selected symptoms	Exposed	0	2
	Not exposed	3	1
Aggression	Exposed	0	1
	Not exposed	5	2
Total		43	37

symptoms of bereavement related to a previous loss or were reexperiencing specific traumatic symptoms related to a previous trauma (4 loss, 4 trauma). Of the 10 unexposed children with no PTSD, whose parents were previously untraumatized, only 1 of the 4 (25%) children with their own previous traumas was reexperiencing symptoms (Table 2).

The children of previously traumatized parents often reported a great deal of anxiety following the sniper attack. Children became fearful of a repetition of the parent's previous trauma or of harm to the parent. For example, a child who drew a heart with her mother's name in it tearfully described how, when her mother was 12, her stepgrandmother shot and killed her grandmother. After the sniper attack, the little girl, age 10, became very fearful that her mother would be killed. She had become anxious, hypervigilant, and unable to concentrate. Her sleep was disturbed and, in the night, she saw monsters, goblins, and her grandmother.

Previous studies have examined the caretaking child as a product of a parent's previous trauma (Armsworth, 1993). Although there was no direct inquiry about caretaking children in this study, a few children were so obviously parenting their parents that a note was made in the chart. At the beginning of the clinical diagnostic interview, children were asked to draw a picture of anything they wanted to and tell a story about it. A child who drew a picture of a deep, dark lake was one of the parenting children. She stated that she was drawing a park where she liked to play. She spent a great deal of time inking and reinking the lake. When the clinician commented that there must be things deep in that lake that no one could see, the child burst into tears. Since the sniper attack, the girl had been extremely worried that something would happen to her mother. Her mother had been traumatized by the traumatic death of her own mother.

***Parent's Previous Traumas and Children's Previous Traumas.*** The sniper attack was an incident that affected a school of more than 1,100 children. The child's location in relationship to the sniper was more important to his or her reaction than prior experience, family circumstances, or other factors. Children's previous traumas did not significantly affect trauma scores (Nader *et al.*, 1990; Pynoos *et al.*, 1987). Half of the children in this sample had experienced previous traumatic events themselves. These previous traumas included accidental injury to children or relatives, witnessing family violence, or having a relative violently killed or injured. Seventy-four percent of children (32) in the parents with trauma group had been traumatized before the sniper attack, compared to only 22% of the children (8) in the parents without previous trauma group (Table 3).

Inasmuch as some of the children of abused parents have been observed to repeat their parent's specific traumatic experience, repetition of specific parental trauma was examined. Previously traumatized parents of the children in this sample had been exposed to violent deaths or injuries of relatives, witnessed severe bloody injury, or experienced armed robbery, war, disasters, their child's sudden/accidental death or injury, their own injury, rape, or domestic violence. One had a nervous breakdown after personal illness and the multiple deaths of

**Table 2. Unexposed Children, Sniper Attack**

	% Parent with trauma	% Parent, no trauma
Traumatized	16	0
Reexperiencing	42	8
Selected symptoms	16	8
Aggression	26	15
Nonsymptomatic	0	69

**Table 3. Child's Previous Trauma, Sniper Attack**

		Parent trauma	No parent trauma
PTSD	Exposed	19	2
	Not exposed	1	0
No PTSD	Exposed	0	0
	Not exposed	8	4
Selected symptoms	Exposed	0	0
	Not exposed	1	0
Aggression	Exposed	0	0
	Not exposed	3	2

loved ones. The child's previous trauma most often did not replicate the parent's previous trauma. For example, a father with a severe accidental leg injury had four children whose close cousin (mother's side) was shot in the head. One of the children was also badly burned in an explosion. A grandmother had two grandchildren in her care severely burned. Her child was bitten by a dog and witnessed a robbery in which she was threatened by the robber. A parent was attacked sexually, and in the same year, her brother was shot, losing an eye and a lung. Her child was hit by a car at age 5, resulting in a persistent leg injury.

In two cases, the child's trauma somewhat resembled a parent's traumas. In the first, a mother (1) was raped and attempted suicide, and (2) on a later occasion, watched while a friend was hit by a car and the friend's leg was cut off. Her son, who was exposed to the sniper attack, was traumatized by the injury of his sister in an automobile accident. In the second instance, in a family with ongoing spousal abuse, the mother was once stabbed by the father. Her daughter witnessed a man being stabbed by another man.

**Behaviors of Special Concern.** Following the attack, several specific characteristics eliciting concern were found in previously traumatized parents and other "red flag" behaviors were found in children. Awareness of the child's sniper-attack experience appeared frequently to reawaken symptoms in the parent from a previous trauma or loss, or it resulted in intense avoidance. As a result, the parent was either emotionally unable or unavailable to assist the child, or was intolerant of the child's posttrauma reaction. Additionally, some of the traumatized or previously traumatized parents became overprotective of their children following the traumatic event.

Following the sniper attack, 18 of the 54 exposed children in this sample exhibited behaviors of significant concern. These behaviors included fire setting, suicide attempts (e.g., 3 siblings took large doses of their father's medication), increased acts of aggression, dangerous climbing behaviors (e.g., a child climbing on car and rooftop), injuries, night terrors with sleepwalking (e.g., a child who awakens screaming and tries to run out of the front door in the night), severe depression with vomiting, incessant crying, freezing in front of oncoming automobiles, and risk of suicide. These behaviors were associated with parental psychopathology, parent's and/or child's previous trauma, unresolved traumatic grief, and child's psychopathology.

### Hostage Taking and Suicide

A woman whose father had 10 years earlier committed suicide, and who had 3 years earlier divorced, was undergoing financial and emotional difficulties related to an on-the-job injury. In March 1987, she entered an elementary schoolyard through a side entrance, went into



a fifth-grade classroom, and held the class and teacher at gunpoint. She dictated, to the teacher, a letter for the news media about her doctors, claiming inappropriate care. She waved two guns at the children, became agitated when other children appeared at the door to join the class, and accidentally fired the gun, barely missing one child. Some of the children feared for their lives and the lives of their teacher and classmates. The teacher attempted to talk the woman out of killing herself. She asked the children if they wanted the woman to live, and they all yelled "Yes." When this was ineffective, she asked the children to put their heads down and pray that the woman did not shoot herself. The woman shot herself in the temple in front of the children. The woman slumped to the floor in the corner of the room. Blood poured from the side of her head and then from every opening in her face.

School staff escorted the children out of the room, called for help, and attempted to assist the woman. The fire alarm was sounded and all of the children in the school were ushered out onto the grounds and advised of the event. The hostage taking culminated in the assailant's death just before lunchtime. Psychologists and parents were called into the library area to comfort the exposed children. Other children had lunch inside their classrooms. A process of cleanup lasted into the night to prepare the school so that children could return to the classroom the next day.

**Methods.** All of the children from the fifth-grade classroom that was held hostage and the sixth-grade classroom next door were interviewed in semistructured clinical interviews, and their parents were interviewed separately. The clinical diagnoses and CPTSD-PI (Nader, 1984) of these children were reviewed for the purposes of examining the issue of transgenerational trauma.

### ***Results: Parent's Previous Trauma and Children's Reactions.***

**Exposed Children.** In this sample, 50% of the exposed children had a parent with a previous trauma and 50% had parents without previous trauma. Traumatic reaction to the hostage taking and suicide was highly correlated with exposure to the event. Of the 24 children who were present (one was home ill) in the classroom held hostage and exposed to the suicide, 18 (75%) were symptomatic whether or not they or their parents had a previous trauma. Of the 6 children who were present but not symptomatic (25%), 4 had no previous trauma and no parent with a previous trauma, 1 had a parent who had been in an airplane crash and had undergone successful therapeutic intervention, and 1 had a previous trauma during which both parent and child took successful action toward their own survival. Sixty-nine percent (11) of the children whose parent(s) had a previous trauma also had a previous trauma (2 were intrafamilial violence). Only 22% (2) of the children whose parents had no previous trauma had a previous trauma. The 3 exposed children who showed both an increase in mature and in regressive behaviors had a parent with a previous trauma. For example, 1 young girl, who insisted upon being talked to by her mother as though they were peers, also began playing with toys appropriate for a younger child. Three of the exposed children complained of persistent fatigue following the event; in all three cases, both parent and child had had a previous trauma.

**Unexposed Children.** Twenty children in the classroom next door to the classroom held hostage were also interviewed. These children were aware of the shooting only after it had occurred. They did not witness the event. The bullet that nearly missed one child in the classroom held hostage went through the wall of their classroom and lodged in a file cabinet. They were unaware of this when it occurred. Six of these children were referred for treatment. Three were reexperiencing the symptoms of a previous trauma, 1 was reexperiencing grief for a grandparent, 1 was evasive upon questioning, and 1 exhibited increased aggression and defiance. Of

the 6 children, 5 (83%) had parents with a previous trauma, and the sixth had a mother who was prone to panic attacks.

Fourteen other children in the school, who were not directly exposed to the hostage taking and shooting, were symptomatic after the event. Eleven of these children (79%) had parents with previous traumas (2 with a family trauma). Among the other 3 children, 2 had parents whose own parents had died when they were young (ages 5 and 14) and 1 lived two houses down from the assailant. Of these 14 children, 4 had a previous trauma and 1 had a mother who had seizures.

## DISCUSSION

The clinical examination of two groups of children exposed to catastrophic events suggests the transgenerational transmission of vulnerability. Traumatic events occurring in a group setting affected children with or without a parental history of trauma. Previous individual traumatic exposure, however, was more common among children with parents who had had a previous trauma. The parent's specific trauma was generally not repeated. Instead, children appeared more vulnerable to traumatic exposure of some kind and/or to increased symptoms.

More children in both groups whose parents had had a previous trauma had experienced a trauma of their own prior to the school event. These two samples were comprised of demographically very different groups of children. Although one group of children lived in a high-crime, low-socioeconomic region of Los Angeles in which children might be expected to have ample opportunity for traumatic exposure, the other group lived in an upper-middle-class area of Orange County, California, with a very low crime rate. The differences between children within each of these groups, in relationship to parents' previous trauma, lend strong evidence to an association between a parent's prior experience and a child's subsequent traumatic experience.

As has been found in studies of children of Holocaust survivors (Barocas & Barocas, 1980; Danieli, 1985; Klein & Kogan, 1986; Solomon *et al.*, 1988) and of Vietnam veterans (Dan, 1995), the two studies described in this chapter suggest that children whose parents have been previously traumatized may have a subset of traumatic symptoms, specific psychological and behavioral disturbances, and increased vulnerabilities to or during traumatic exposure. Recognizing the legal significance of these findings, it is important to iterate that the children in this study who had PTSD were traumatized by the occurrence of an actual traumatic event. They did not have PTSD as a result of the parents' trauma but in relationship to the sniper attack or the hostage taking and witnessing of suicide. A parent's trauma does not guarantee that a child will be subsequently traumatized. Not all parents who have been traumatized have children who are subsequently traumatized (see Dan, 1995).

This study has, nevertheless, dynamically demonstrated the possibility of increased symptoms, following a traumatic event, for children whose parents have been previously traumatized. The increase in symptoms may be related to the parent's emotional unavailability or overprotectiveness as a result of their own experience. Caretaker unavailability, intolerance, and overprotection have all been associated with increased traumatic reactions in children (Bloch, Silber, & Perry, 1956; McFarlane, 1987; Nader & Pynoos, 1993; Silber, Perry, & Block, 1958). In addition, the child's traumatic exposure may result in the parent's reexperiencing aspects or symptoms of his or her own traumatic experience. Adults' traumatic reexperiencing, increased avoidance, and increased arousal have been found to create difficulties in the recovery of children following traumatic exposure (Nader, 1994). Whether these or other

factors are the primary contributors, the increased vulnerability of children during or following traumatic events suggests the need to include a parent's previous trauma among the list of risk factors for increased symptomatology following traumatic events.

In examining the vulnerability of Holocaust-survivor offspring to increased traumatization from a traumatic event, Solomon *et al.* (1988) have elaborated possible contributing factors: (1) heightened vulnerability to stress among children of Holocaust survivors (see Danieli, 1980); (2) learned responses from parents; (3) the possible undermining of recovery by overprotective survivor parents; (4) a phenomenon similar to the increased intensity of a second combat trauma (i.e., the parent's previous trauma serves as the previous event); and (5) a sense of themselves as protectors of their surviving parents and as needing to undo the damage, which may add stress and issues of failure during the potentially traumatic experience (here, combat; see also Danieli, 1985). This study lends credibility to the relevance of these factors for children of traumatized parents in general. Like Holocaust survivors, other traumatized individuals who are or become parents often exhibit overprotectiveness, emotional unavailability, reduced stress tolerance, and avoidance of traumatic issues, among other characteristics that affect parenting behaviors and their results.

The findings described in this chapter have also indicated some of the protective factors relevant to previous parental trauma. As has been suggested elsewhere, there is some evidence that the parent's resolution of his or her traumatic experience or successful action taken during a traumatic experience may serve to minimize traumatic response (see Nader & Pynoos, 1993; Pynoos & Nader, 1988). Moreover, children whose parents have not been traumatized have sometimes appeared to be less vulnerable than other children.

## Conclusions

These two clinical studies have provided the opportunity for a preliminary examination of the effects of parents' traumatic experience upon children. The results of these two studies strongly suggest that children whose parent(s) are traumatized by violence or disaster may, in fact, be more likely to be subsequently traumatized and are at risk of experiencing increased symptoms following a traumatic event. Additional study is needed to confirm these results and to examine their meaning. Danieli (1993) proposed that Holocaust-survivor parents who teach their children, out of love, to be prepared for the traumas that they themselves have endured may inadvertently be teaching them that these traumas are to be expected in their lives and may thus contribute to their vulnerability to a repetition of trauma. From transgenerational transmission described in the oral and written traditions of several cultures, it appears that experiences that occur with intensity—positive or negative—are imprinted on the parent or family in such a way that they emerge in subsequent generations. The separate studies of Suomi, Calhoun, and Ward described earlier suggest that this imprint occurs and is transmitted genetically or biochemically. It is likely that loving and other verbal prescriptions, learned behaviors, learned ideas, genetic or biochemical factors, and parenting styles contribute to this phenomenon. The increased vulnerability to traumatization found in the two studies reported in this chapter suggests the advisability of intervention following traumatic exposure to address symptoms and special issues with children whose parents have been previously traumatized.

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