



## Editors' Comment

*All children encounter everyday stresses such as pressure from academic work, peer challenges, family crises. Some children, however, are faced with more intense and extreme stress due to their exposure to extraordinary, highly disruptive, even life-threatening events or potentially traumatic situations. The outcome for children experiencing traumatic events varies; fortunately, most children recover and adapt over time, but others continue to suffer and may develop psychological symptoms. Researchers investigating the psychological impact of traumatic events on children's development have identified the factors --personal, family and community - that foster resilience and the factors that contribute to the persistence of psychological symptoms. It is hoped that these efforts will contribute to the design of prevention and intervention strategies to help children and adolescents cope and recover from the effects of traumatic stress.*

*In this issue of the NYU Child Study Center Letter, the authors address what influences resilience, characteristics of resilient children, their families, and their communities, and how to nurture resilience. AG/HSK*

## Children's Resilience in the Face of Trauma

### Introduction

Stressful events are common occurrences in the lives of our children. Traumatic stress, however, occurs following events which are unexpected and physically threatening to either children or their loved ones. Traumatic stress can occur as a result of exposure to a single event such as a natural disaster, a violent crime, the Challenger Space Shuttle Explosion, the Oklahoma City Bombing, the 9/11 terrorist attacks, exposure to a violent death (homicide or suicide). Traumatic stress can also occur as a result of exposure to ongoing events such as acts of war, community or domestic violence, and child abuse or neglect. In the presence of stressful events, the developmental challenge for children is to learn to cope, continue to adapt to changes and to grow into competent adults. Children who are able to succeed in the face of adversity have been described as *resilient*. This article will discuss what we have learned from resilient children about the capacity of human adaptation and will identify protective processes that help children deal successfully with traumatic stress and adversity. We will describe the personal characteristics of resilient children, the types of families that foster resilience, and how communities can promote resilience and support every child's recovery from trauma.

### What are stressors and traumatic events?

A stressor is an event or experience that can be expected to cause stress in

many children with the potential for disrupting normal functioning.<sup>1</sup> A traumatic event is expected to overwhelm a child's coping resources. Children (or adults) are not expected to sustain high levels of psychological wellbeing in the immediate aftermath of a disaster or in situations of severe threat.<sup>2</sup> However, as the acute phase of distress passes, many children return to normal levels of functioning and proceed in their development in a healthy fashion.

### Risk factors

Difficulty in a child's ability to successfully deal with a trauma is likely to be influenced by the presence of the following risk factors:

- Directly witnessing the event or having a family member who was exposed to the event
- Surviving the death of a parent or another significant person
- Experiencing mental health or learning problems before the event
- Experiencing a previous traumatic event
- Lacking a strong support network
- Having a parent whose levels of stress and fear are on the rise<sup>3</sup>

The presence of at least one of these risk factors increases the chances that a child exposed to traumatic stress will face a more difficult road to recovery.<sup>4</sup>

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## Problems in coping after a traumatic event

The terrorist attacks that took place on September 11<sup>th</sup> left an indelible mark on all of our lives and elicited various reactions of sadness, anger, fear, confusion and grief. The largest study to date assessing children's reactions following a traumatic event was completed six months after 9/11 among over 8,000 New York City public school children. The study, commissioned by the NYC Board of Education reported that a significant number of 4<sup>th</sup> -12<sup>th</sup> graders displayed a variety of symptoms and disorders including agoraphobia (fear of going out or taking public transportation), separation anxiety disorder (fear of separation from parents), posttraumatic stress disorder, conduct problems and depression.<sup>5</sup>

After the Challenger space shuttle catastrophe in January of 1986, Lenore Terr et al reported that children reacted with a plethora of symptoms. The comments listed below describe some of the symptoms of posttraumatic stress such as jumpiness, flashbacks and nightmares. But perhaps most pervasive may be children's changes in their beliefs about the future, about the world as safe and themselves and their parents as competent to respond effectively to the trauma, as well as to other dangers. Even every day risks such as having ambitions for the future were affected.

- "Before the Challenger blew up, I thought everything was perfect. Now I realize things go wrong." -A girl, age 15, Concord, 1986.<sup>6</sup>
- "I had a dream the other night of a fire in my barn. One horse of mine and eight other horses were killed." - A girl, age 15, Concord, New Hampshire, 1986.<sup>7</sup>
- "I had wanted to be a space shuttle person but I gave it up." - girl age 9, Porterville, CA, 1987.<sup>8</sup>

## What is resilience?

There are no magical processes or superhero-like shields that guard children from symptomatic reactions to trauma and stress. While some children may require professional help to deal with the aftermath of traumatic events, most cope effectively and continue to master the developmental tasks appropriate for their age.

Resilience, understood as a set of beliefs, feelings, and behaviors that emerges at a time of adversity, refers to the ability of the child to 'spring back' from adversity. According to researchers it is "a process of, capacity for, or the outcome of successful adaptation despite challenging and threatening circumstances."<sup>9</sup> While there is currently great interest in resilience following single, large-scale traumatic events (such as 9/11), there are various other circumstances under which resilience has been observed and studied in children. The emergence of resilience has been noted among the following:

- *Children who recover from traumatic events:* These children experience acute or chronic traumatic events such as 9/11 or the Oklahoma City Bombing, or are victims of physical and sexual abuse and child neglect.
- *Children who show good outcomes despite stressful experiences:* These children are exposed to common stressors like divorce or suffer from repetitive stressors over a short period of time such as the death of a sibling and parent illness.
- *Children who show good outcomes despite their high-risk status:* These are children born into adversity such as having a parent with schizophrenia, living in violent or very impoverished environments, or suffering from a developmental disability or chronic illness.

## 'Springing back' after a traumatic event

Unfortunately, we know very little about the timing or pace at which we should expect resilience to emerge in children. This phenomenon has been investigated in adults, and the emerging picture suggests that resilience is comprised of a host of factors. Researcher George Bonanno, Ph.D. has found, for example, that after a traumatic stressor, adults experience a dip in psychological and physical functioning which lasts for several months, but that on average, adults return to pre-trauma levels of functioning approximately one to two years later.<sup>10</sup> However, the return to previous functioning can take longer depending on the nature of the event, the support the individual has, and the attitudes and beliefs the individual holds. Understanding and tracking resilience in children is likely to be even more complicated. All of the above factors must be taken into account as we consider the potential resilience in children, and we must be sensitive to its expression depending on the age of the child. Beliefs about the world are differently expressed depending on whether the child is 5 or 15 years of age.

The experience of 9/11 has left us with the realization that terrorist attacks can occur in the United States. As a result, mental health professionals have highlighted the importance of strengthening resilience in children as a preventive strategy in protecting their psychological well-being in the face of decreased perceptions of safety and security. It is important to follow children who are doing well and identify the "magic" ingredients that contribute to their springing back. If we can isolate the critical characteristics of resilient children and families, perhaps we can develop programs to foster the same conditions among families and children who appear at risk for problems.

There is limited information about resilience following terrorism or political

violence. A handful of studies have indicated that the capacity of preschool and middle school-aged children to function well after these events is largely contingent upon the parents' own reaction and their capacity to promote adaptive coping responses in their children. For example, in a study of posttraumatic stress in Israeli preschool children 30 months after SCUD attacks, the psychological wellbeing of mothers and other family members was the best predictor of the child's mental health.<sup>11</sup> When families and mothers 'did well,' so did their children. Conversely, families and mothers who showed negative posttraumatic reactions to the attacks had children who showed similar negative outcomes.

Further understanding of factors influencing resilience can be obtained from reports of children who have experienced a range of other types of traumatic stressors. These include children who have had very ill parents or who have lived in highly impoverished environments. For example, in a study done by Werner and Smith,<sup>12, 13</sup> a cohort of 700 children born on the island of Kauai, Hawaii in 1955 was tracked over 30 years. One third of the group was designated as high risk because of impoverished living conditions such as chronic poverty, low maternal education, familial conflict or instability, and perinatal risk. Nevertheless, 10% of the high-risk cohort, having four or more of the above risk factors, was identified as resilient in adolescence. These adolescents were found to be more mature, achievement motivated, and socially connected to their peers than their less competent high-risk equals who developed mental health problems, teen pregnancy, and delinquency. Resilient children displayed engaging social skills and had strong relationships with parents or parent substitutes, including siblings, and community support network.

While there are few long-term follow-up studies of children exposed to trauma, the information we do have suggest

that resilience is shaped by individual differences in the child and variations in the recovery environment. As resilient children bounce back from a stressor, they begin to trust familiar adults, play and laugh again, learn new skills, make and keep friends, do well in school, and create a positive attitude about the world.

## What influences positive adaptation to trauma?

An array of protective characteristics or factors has been identified in resilient children. They are present at the individual, family, and community level and contribute, together, to adaptation following trauma during childhood: These five sets of factors are: (1) trauma characteristics; (2) the child's own resources; (3) the child's family characteristics; (4) the community support (i.e. from teachers, peers, friends, mentors); and (5) developmental path.

### (1) Trauma characteristics

When the trauma is of low to moderate magnitude, children often are able to cope successfully. The child's inner experience of the severity of the trauma may depend on the following characteristics: the proximity of the child to the event, closeness to the victims, and degree of emotional suffering at the time of the trauma. Children who are in close proximity, who feel emotionally close to the victim, and who experience intense emotional reactions (i.e., fear, panic) during the event tend to be at risk for subsequent problems. For example, East Coast children who lived in the same town in New Hampshire as the teacher who was killed in the Challenger space shuttle explosion experienced more distress after the event than the more removed West Coast children who resided in California.<sup>14</sup> Children who lost friends in the Oklahoma City Bombing were found to be more distressed than those who lost acquaintances.<sup>15</sup>

## (2) *The child's own resources*

Children may be genetically 'wired' to respond to stress in certain ways, some of which are more adaptive than others. The child's own resources, however, consist of these initial dispositions as they are shaped by the environment. Characteristics such as persistence, goal-oriented, adaptability, optimism, willingness to approach novel events, high self-esteem, intelligence, good social skills contribute to positive adaptation (see box).<sup>16</sup> Although there are wide individual differences among chil-

### Resilient children show:

- 1) **Persistence** – The child works on something until it is finished, tries to succeed on a task after failing, stays committed to his/her goals, and remains encouraged.
- 2) **Goal-oriented/Motivated** – The child has goals that are important to him/her, works hard to accomplish goals, and enjoys having goals and meeting them.
- 3) **Adaptability** – The child feels comfortable with change, believes there are many ways of seeing things, and can easily compromise.
- 4) **Optimism** – The child is usually enthusiastic, cheerful, confident that the future holds good things to come, and optimistic that things will get better in the future.
- 5) **Willingness to approach novel events**– The child finds it easy to go to new places, enjoys meeting and interacting with new people, and can return to a place where he/she had a bad experience.

- 6) **High self-esteem**– The child thinks he/she is a lot of fun to be around, that he/she can handle stressful things in life, and likes him/herself.
- 7) **Intelligence** – The child generates creative or novel solutions to unexpected problems or can identify similarities between a new problem and one he/she has already solved.
- 8) **Good social skills** – The child can ask for help when he/she needs it, make friends easily and keep them, and not get into fights.

dren, families can nurture these resilient characteristics during daily interactions in the home. Children who, before the traumatic event, were fearful, anxious, or sad may experience serious reactions, take longer to 'spring back', or require extra attention from their families.

## (3) *The child's family characteristics*

The availability and support from parents and other adults in the home when children are feeling fearful, down, or faced with trauma reminders (i.e., an anniversary, the same location) are critical. Children seek their families for comfort, advice, and/or fun. Studies have found that young children exposed to neighborhood violence who receive supportive parenting (e.g. positive and consistent discipline) show fewer stressful symptoms than those with less supportive parenting (e.g., negative or harsh discipline).<sup>17</sup> Aside from supportive parenting, how members of the family communicate is also important. Resilient children have parents who tend to negotiate their conflicts in positive ways, communicate openly about their disagreements, agree on household rules and discipline, and do not place

children 'in the middle' when family conflicts or crises arise.

## (4) *Community support*

The availability of social, recreational, spiritual, and other types of community programs is important in fostering physical, social, and emotional health for families. From a broad public health perspective, communities foster resilience in a number of ways. The aims of community programs are to enhance protective processes beginning before the child is born and continuing into adulthood. Such programs promote healthy pregnancies to reduce the number of children born into high-risk situations; offer early childhood programs to scaffold success and build self-esteem; provide school breakfasts to promote readiness for academic learning; develop anti-bullying programs to enhance positive school climate; encourage mentor relationships between the child and a competent adult to ease the burden of stressed-out families; provide safe recreational activities for youth; offer job training to increase household wages; or offer parenting courses to promote positive parenting behaviors.<sup>18</sup>

## (5) *Developmental Path*

The expression of resilience varies with age. The way a child reacts to a stressor, the factors which facilitate his/her recovery, and the changes that show a child is recovering depend on the child's developmental stage.

- **Resilience in young children.** Resilient infants and toddlers exposed to frightening events regain a secure base by seeking a close attachment with their caregivers. Resilient preschoolers conquer their anxiety and fear through play, have their caregivers at an arm's reach for security and encouragement, persist on challenging tasks, and venture into new explorations. For example, young children who may wet the bed more frequently or cling more tightly to their primary

caregiver after a traumatic event may let go of these tendencies as they cope effectively. From birth through age 5 the role of the family, particularly the psychological wellbeing of the child's primary attachment, is crucial to foster resilience.

- **Resilience in middle childhood.** Resilient children during middle childhood remember and talk more freely about upsetting events, are able to use language to combat triggers and reminders, ask others for help, practice positive self-talk, or try new activities to keep busy. Middle school children whose grades may have slipped after a traumatic event will show a recovery in their school functioning as they adjust to the circumstances. In addition to the family, as children enter school and participate in other organized social settings (e.g., sports, church, the neighborhood), close relationships with peers, teachers, and other adults play an important role in fostering natural recovery and helping children remain involved in school, social activities, and special events.<sup>19</sup>
- **Resilience in adolescence.** Adolescence is a time of movement towards autonomy and self-reliance as well as a time of questioning identity, values and feelings. Nevertheless, resilient adolescents can talk about their feelings and reactions to peers and/or specific trusted adults such as a grandparent or mentors. So, for example, after a traumatic event, an adolescent might initially be irritable and strident in expressing political views, and withdraw from activities he/she used to enjoy. However, over time, resilient adolescents will show interest in considering different points of view and understanding the feelings and beliefs of others. They will become interested in what their future will be, although

they may not be sure of where they are going.

## Summary

Resilience varies with age and situation, making it a completely unique experience within each child. In this time of global concern with terrorism it is important to pursue several areas of inquiry in order to develop strategies to foster resilience. It is crucial to understand issues such as how resilience emerges with different types of stressors and/or traumas, the timelines for children and adolescents to return to a normal developmental course after exposure to traumatic events, and when to intervene during this timeline of recovery. Our knowledge about the emergence of resilience will develop further as our children deal with different types of stress in their respective environments. However, it is important to remember that resilience is a common phenomenon arising from ordinary human adaptive processes. "It does not come from rare and special qualities, but from the everyday magic of ordinary, normative human resources in the minds, brains, and bodies of children, in their families and relationships, and in their communities."<sup>20</sup> The experience of 9/11 has left us with the knowledge that terrorist attacks can occur in the United States and that going forward, raising healthy children means raising resilient children.

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## References

1. Masten, AS (1994) Resilience in individual development: Successful adaptation despite risk and adversity. In MC Wang & EW Gordon (Eds.) *Inner City Educational Resilience*
2. Masten, AS, Best, KM & Garmezy, N. (1991) Resilience and development: contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425-444
3. Scheering, MS & Zeanah, CH (2001) A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, 14 (4) 799-815
4. Hoven, CW, Duarte, CS, Lucas, CP et al (2002) *Effects of the World Trade Center attack on NYC Public School Students: Initial Report of the New York City Board of Education*. New York: Columbia University Mailman School of Public Health, New York State Psychiatric Institute and Applied Research and Consulting, LLC
5. Ibid, p. 24
6. Terr, LC, Block, DA, Beat, MA et al (1997) Children's thinking in the wake of Challenger. *The American Journal of Psychiatry*, 154 (6)744-751

7. Terr, LC, Block, DA, Beat, MA et al (1999) Children's symptoms in the wake of the Challenger: A field study of distant-traumatic effects and an outline of related conditions. *The American Journal of Psychiatry*, 156(10), 1536-1544
8. Ibid, p. 1540
9. Masten (1994) op.cit. p. 425
10. Bonanno, GA (in press) Loss, trauma, and human resilience: Have we underestimated our capacity to thrive after extremely aversive events? *American Psychologist*
11. Laor, N, Wolmer, L, Mayes, LC & Gershon, A (1997) Israeli preschool children under SCUDS: A 30-month follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 349-356
12. Werner, EE, & Smith, RS (1982) *Vulnerable but Invincible: A Study of Resilient Children*. New York: McGraw-Hill
13. Werner, EE & Smith, RS (1992) *Overcoming the Odds: High Risk Children from Birth to Adulthood*. Ithaca, NY: Cornell University Press
14. Terr (1999) op.cit. p. 1538
15. Pfefferbaum, B, Nixon, SJ, Tucker, PM et al (1999) Posttraumatic stress responses in bereaved children after the Oklahoma City bombing. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38, (11) 1372-1379
16. Cloitre, M (January, 2004) *Resilience in the Face of Change and Adversity*. Grand Rounds presentation, New York University Child Study Center
17. Linares, LO, Heeren, T, Bronfman, E, Augustyn, M, Zuckerman, B, & Tronick, E. (2001) A mediational model for the impact of community victimization on preschool behavior. *Child Development*, 72(2)639-652
18. Masten (1994) op.cit. p. 15
19. Masten, AS & Coatsworth, JD (1998) The development of competence in favorable and unfavorable environments: Lessons learned from research on successful children. *American Psychologist*, 53 (2) 205-220
20. Masten, A (2001) Ordinary magic: Resilience processes in development, *American Psychologist*, 56 (3), 227-238

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