

Fact Sheet

Fostering Resilience in Response to Terrorism: For Psychologists Working With Children



Fostering Children's Resilience in Response to Terrorism

This fact sheet focuses on building resilience in children and youth in response to terrorism and related concerns facing our country. It provides suggestions and ideas for expanding the supportive and protective roles of parents, schools, and communities in the lives of children. Although resilience can exist at any point related to a traumatic event (before, during, or after), this fact sheet focuses on building resilience now, prior to another traumatic or terrorist event.

What Is Terrorism?

Terrorism is the "systematic threat or use of unpredicted violence by organized groups to achieve a political objective. Terrorism's impact has been magnified by the deadliness of modern-day weapons and the ability of mass communications to inform the world of such acts" (Merriam Webster, 2000). This remarkably insightful definition, written more than a year prior to the devastating attacks on our nation, is supported by studies conducted by psychological researchers in the aftermath of these attacks. The definition indicates that people can be terrorized even if traditional weapons or weapons of mass destruction (nuclear, biological, chemical, and radiological) are not used. People can be terrorized simply by the threat of a terrorist attack and the media transmitting this threat.

Although resilience is the usual response to terrorism, the vulnerability of children and adolescents to the negative effects of terrorism must be recognized.

- Terrorism can affect growth and development of children and youth (Silverman & La Greca, 2002; Veenema & Schroeder-Bruce, 2002).
- Depending on the child's developmental level, bioterrorism and related words like "illness," "infection," "vaccination," "quarantine," and "contagion" may be beyond their understanding (Schreiber, 2002).
- Children and families must learn to live with ongoing fear. Children and families need to build resilience in order to cope with these times of terrorist threat and to deal with terrorist events, should they occur.

What Is Resilience?

Resilience has been described as a phenomenon whereby individuals show positive adaptation in spite of significant life

adversities (Luthar, Cicchetti, & Becker, 2000). It is the process and outcome of successfully adapting to difficult or challenging life experiences, especially highly stressful or traumatic events (O'Leary, 1998; O'Leary & Ickovics, 1995; Rutter, 1987). Resilience is an interactive product of beliefs, attitudes, approaches, behaviors, and, perhaps, physiology, that help children and adolescents fare better during adversity and recover more quickly following it. Resilient children bend rather than break during stressful conditions, and they return to their previous level of psychological and social functioning following misfortune. Being resilient does not mean that one does not experience difficulty or distress or that life's major hardships are not difficult and upsetting. Rather, it means that these events, although difficult and upsetting, are ultimately surmountable.

Resilience seems to be the general rule of human adaptation (Discovery Health Channel and APA Practice Directorate, 2002; Masten, 2001). For example, multiple studies now demonstrate that most Americans who were not directly affected by the terrorist attacks of 9-11 (i.e., did not experience loss of loved ones, jobs, homes, possessions) recovered within 6 months of the event.

What Contributes to Resilience?

A number of psychological factors contribute to how well children and adolescents adapt to adversity. These include:

- The way youngsters view and engage the world,
- The availability and quality of social resources and support, and
- The presence of specific coping strategies (Dohrenwend & Dohrenwend, 1981).

In each of these domains, resources and skills associated with more positive adaptation to stressors can be cultivated and practiced, often with the help and support of family members.

Child and Family Characteristics

Child and adolescent characteristics associated with good adjustment in stressful circumstances include optimism, self-efficacy, mastery, and personal competencies. Families that cope well with stressors are cohesive and supportive, utilize

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effective coping skills, and are hardy. Child and family characteristics that contribute to resilience are listed below.

- *Resilient children and adolescents are optimistic.* They maintain hope about future outcomes, and this view is associated with the use of active, problem-focused coping when dealing with stressful life events (Carver & Scheier, 1987; Lazarus & Folkman, 1984).
- *Resilient children and adolescents have self-efficacy.* They believe that they have the skills necessary to effectively manage or accomplish the task at hand (Bandura, 1982), resulting in sustained effort and a greater likelihood of success.
- *Resilient children and adolescents have a sense of mastery.* They believe that they can exert positive control over their environment. Breaking down complex problems into smaller, more accomplishable tasks and goals can result in a series of immediate successes that enhance feelings of mastery and control over the problem (Meichenbaum, 1985).
- *Resilient children and adolescents have personal competencies.* They possess academic or social competencies that enable them to deal with stressors in a constructive and positive manner (Silverman & La Greca, 2002; Yule, Udwin, & Bolton, 2002).
- *The families of resilient children and adolescents are cohesive and supportive.* Evidence suggests that family cohesion and support buffer the negative impact of stress in youth, perhaps because they promote active coping and reduce emotional distress (Sagy & Dotan, 2001).
- *The families of resilient children and adolescents use effective coping skills to deal with stress.* Parents and caregivers who cope well with stress model and promote more effective coping in their children (Gurwitsch et al., 2002; Lyons, 1987).
- *The families of resilient children and adolescents are hardy.* Hardiness describes those who are actively engaged, who believe they can influence the course of events in their lives, and who accept change as a part of life—as a challenge rather than a threat—and know that it can be beneficial (Kobasa, 1979). Evidence suggests that hardiness buffers the negative impact of stress, perhaps because it is associated with appraisals of events that minimize emotional distress and promote active coping (Wiebe, 1991).

At different ages and developmental levels, optimism, self-efficacy, mastery, and personal competencies may be exhibited differently. Preschoolers may reveal these strengths in their play, whereas elementary-school-age children may do so verbally, and adolescents may do so cognitively, leaving parents to witness only the outcome. Younger children and children

with developmental disabilities have cognitive limitations, making these adaptive skills more difficult and the role of parents especially important. Because children are influenced by multiple sources (e.g., parents, teachers, peers, clergy), parents do not have to take on the burden of being the sole developer of these strengths in their children. For example, religious and spiritual leaders and experiences may provide a sense of meaning for children and youth (Garbarino, 1999). Similarly, a sense of mastery may develop from multiple strengths, including academic, athletic, social, and/or artistic talent. A child's ability to learn and succeed in any given area can be applied to a stressful experience.

Social Ties and Resources

People seek out others for solace and support during difficult times. Identifying and utilizing these resources are important for resiliency.

Social support is critical to managing stress. Caring and supportive relationships can provide emotional support that may buffer the impact of acutely stressful situations or crises and allow for expression of difficult emotions. Supportive social networks also can provide assistance and information relevant to managing traumatic stressors (Cauce et al., 1990; Prinstein et al., 1996). For children and adolescents, parents and close friends represent primary sources of support (Cauce et al., 1990).

- *Support from parents and family members* has been associated with the adjustment of children and adolescents following disasters, war, and acts of terrorism (Gurwitsch et al., 2002; Klingman, 2002; Yule et al., 2002). In the immediate aftermath of 9/11/01, Schuster and colleagues (2001), in a representative study of 560 Americans, found that the vast majority of parents (85%) reported that they or another adult in the home talked to their children about the attacks for an hour or more, and most had also participated in group activities related to the events.
- *Support from classmates and close friends* represents an additional and significant source of support that aids adjustment following traumatic stressors (La Greca et al., 1996; Prinstein et al., 1996).
- *Reaffirming ties to such institutions as social and religious groups* may also have beneficial effects during times of stress (Hobfoll et al., 1991). In fact, 90% of Americans surveyed immediately after the 9-11 attacks reported turning to prayer, religion, or spirituality in an effort to cope (Schuster et al., 2001).

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- *The act of providing help to others* during difficult times may be beneficial to the provider as well as the recipient). It is empowering for children and adolescents to help others (Ayalon & Waters, 2002; Taylor, Falke, Mazel, & Hilsberg, 1988).

Effective Coping Strategies

There is no one right way to cope with stressful events (Silver & Wortman, 1980). Although people often focus on trying to control their emotions in the grip of crises, longer-term adjustment requires more of a problem-focused approach, when the difficulties posed by the stressor can be actively addressed. This focus on addressing problems minimizes the feelings of helplessness often associated with disasters and replaces these with an increased sense of control and personal mastery. In general, both active coping (i.e., doing something to address the problem) and avoidance coping (i.e., distraction) have been associated with better psychological and physical outcomes in children and adolescents following traumatic stressors (Compas et al., 1988; Klingman & Kupermintz, 1994).

- *Active coping* (i.e., doing something to try to address the problem) is typically associated with better psychological and physical outcomes than avoidant coping (Holahan & Moos, 1985). Following the 9-11 terrorist attacks, active coping was associated with less general distress, while behavioral disengagement (giving up), self-blame, denial, and substance use were associated with more distress and/or post-traumatic stress symptoms (Butler et al., unpublished data; Silver et al., 2002).
- *For low-control situations*, when the difficulties posed by the stressor cannot be addressed actively (such as the possibility of a future terrorist attack), avoidance and emotion-focused coping (e.g., seeking support, expressing feelings) may help children and adolescents reduce or minimize anxiety (Klingman, 2002).
- *In contrast, negative coping* (i.e., giving up, blaming self or others) has been associated with more severe stress reactions in children following traumatic stressors (La Greca et al., 1996).

How Can People Build Resilience?

What Works

Parents, teachers, and other caring adults can help children and adolescents cope with stressful events and build resilience in several ways.

- *Provide children and adolescents with opportunities to share and discuss their feelings and concerns.* This will enable parents and other caring adults (e.g., teachers) to correct any misinformation or misperceptions and to provide reassurance about safety.

- *Encourage children and adolescents to resume normal roles and routines or develop new routines.* Youngsters feel safe and secure when their activities are predictable and not always focused on terrorist-related events (Vernberg & Vogel, 1993).
- *Maintain social connections.* Youngsters' friendships and social activities are important for normalizing children's and adolescents' lives and promoting good adjustment.
- *Reduce or minimize children's and adolescents' exposure to upsetting media images* related to terrorism by eliminating viewing without an adult present, restricting media viewing, discussing news shows and other programming with children, and actively encouraging alternative activities (e.g., reading, athletic activities, games with friends).
- *Encourage children and teens to stay healthy and fit* by eating well and getting regular exercise and proper sleep. Maintaining good health is important for coping with stress.
- *Encourage children and adolescents to use positive strategies for coping* with stressors that ensue following terrorist acts. Parents and caring adults may also model positive coping for children.

What Doesn't Work

- *Avoiding discussions of distressing events.* Parents and other caring adults may think that children are not bothered by events or that discussions of events will be upsetting to them; however, this may lead to missed opportunities for sharing and support.
- *Pressuring children to talk.* Create a positive, receptive atmosphere for discussions, and let children bring issues up as they choose. Occasional direct questions about how a child is doing will communicate to the child that the parent or adult is interested.

Below is some additional information about what parents, schools, and communities can do to build resilience in children and youth.

What Can Parents Do To Build Resilience in Children and Adolescents?

Parents are the most important influence in children's lives. Numerous studies of children exposed to various kinds of trauma have found that the strongest protective factor against the development of mental health problems is the presence of a positive attachment figure (Garbarino, 1999). The great demands on parents during stressful periods intensify the need for self-monitoring and self-care.

- *To promote resilience in their children and adolescents, parents must first take care of themselves.* As parents promote their own

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self-esteem and self-efficacy, they also become first-rate role models for their children. Parents should:

- Get the required sleep, exercise, and nutrition
 - Focus on personal relationships, utilizing adult support systems
 - Engage in a balance of work and nonwork activities
 - Address any mental health problems they have that may interfere with coping
 - Learn and practice adaptive coping skills
- *Child resilience is promoted by parenting that is warm and nurturing and that establishes clear limits.* Parents need to:
- Set clear rules and have consequences for breaking rules
 - Create a consistent and predictable home environment; this promotes children's sense of mastery and efficacy
 - Recognize that developmental changes require parenting changes

For example, respect for autonomy in adolescence conveys the parent's belief that the teenager has the ability to handle stress.

- *Parents and children need to establish a safety plan in case of a traumatic event.*
 - Children should be reassured that the safety plan may never be used, but that it exists as a protection in case a terrorist event occurs in their area.
 - Safety plans should
 - be with children and adolescents at all times
 - be reviewed and practiced regularly
 - include information about how to reach parents and whom to call if parents are unavailable
 - identify trusted individuals in the child's school and neighborhood
 - identify safe travel routes between home and school
- *Parents should also discuss school safety plans for potential terrorist events with their children's teachers and school administrators.*

What Can Schools Do To Build Resilience in Children and Adolescents?

Schools provide an excellent environment in which to teach and enhance skills for building resilience. As children are used to learning in a classroom environment, school groups are a natural extension when setting up exercises for building resilience. Some ideas for building resilience in the school setting include the following:

- *Identify supportive adults in children's lives.* These often include family members and teachers, but may also be expanded to include scout leaders, coaches, religious leaders, and first responders to whom children can turn in the event of an emergency. Help children of all ages generate a list of potential people to whom they can turn in the event of a terrorist attack.
- *Create positive connections by developing classroom projects* that increase the opportunities for teamwork and respect. These can provide children with a sense of belonging and contributing to something beyond themselves. Ideas can include artwork for the school buildings around themes of helping, respect, and diversity.
- *Enhance positive attitudes by developing coping strategies* such as positive self-statements. The idea of mastery and control over an event is another important ingredient for resilience. Positive thinking can be used before taking tests, giving presentations, etc. The skills need to be practiced during day-to-day activities, not only when a traumatic event occurs.
- *Teach children to relax in the face of difficulties* by mastering simple relaxation techniques such as deep breathing, muscle relaxation, or using imagery. These can be practiced prior to test-taking, sporting events, recitals, presentations, etc.
- *Help children set realistic goals* by thinking in terms of baby steps. Help children understand that problems do not need to be managed all at once, but can be solved by attacking them one piece at a time. Children can begin to think of problems as a pie and to develop solutions for each piece of the pie; soon the entire pie is consumed by solutions.
- *Help children identify positive coping strategies* that can be used in the face of adversity. These may take many forms and can be used at different times. In general, active coping strategies (i.e., doing something positive to help—such as writing cards or letters, collecting money or volunteering, making positive self-statements, exercising, eating well, keeping a journal, getting together with friends or family) are associated with better outcomes than avoidant or passive coping (i.e., withdrawal, self-blame, denial).
- *Increase children's sense of mastery and control* by discussing safety plans and practicing them with the children. This

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enhances the belief that school personnel can manage a terrorist event should it occur and that children also have an active role to play. Encourage families to develop similar safety plans for use in the home, with specific contingencies for separation of family members.

How Can Schools Build Resilience Through Preparedness?

One of the most important aspects of enhancing resilience in children and adolescents is increasing preparedness in the school setting. School is generally seen as a place of safety and security. By knowing that school personnel have a plan to manage any terrorist event (or other incidents), youngsters will find their stress is reduced. One of the best examples is school response to possible fires. Students across the country recognize fire bells and know how to react in the event of a fire. Drills are standard in all school settings. Preparedness reduces the potential for chaos or harm to students should a fire occur. Terrorist events should be managed in much the same way.

Schools should develop crisis response plans in the event of terrorist attacks. These plans should include the following elements:

- Plans for management of the children
- Evacuation procedures, with back-up plans
- Communication procedure

The plans must include information about in-school communication as well as how the school will communicate with parents.

• Plans for reunification

It will be important to develop response procedures with active involvement of parents, first responders (police, emergency, fire), and community partners from mental health, public health, hospitals, and the American Red Cross.

Mental health services should be available after a terrorist event, and preparedness involves identifying such services. This means forming relationships with child specialists who are knowledgeable in the area of trauma.

• Practice

Practice is important. These plans may never be needed; however, understanding and practicing them gives children and adolescents a greater sense of security and control should the situation arise. The perception of control is critical to enhancing resilience.

Mental health professionals in schools can consult with parents. Several issues that need attention well before a terrorist event include the following:

- *Preparing parents to respond to the psychological aspects of terrorism*

Vernberg and Vogel (1993) provide a model for such a response. Parents can be educated around issues such as

- Coping with terrorism
- Ways of talking to children about terrorist acts
- Parental control of media viewing

- *Educating parents as to the effects of trauma* (Alpert & Duckworth, in press), including:

- Common child and adolescent reactions to trauma
- Risk factors that may result in a more severe response
- Indicators of post-traumatic stress disorder
- When to seek professional help

School and community services must be coordinated. Schools are critical in building resilience in children, but they do not have to do the job in isolation. Many organizations stand ready to partner with school personnel in serving the needs of children.

What Can Communities Do To Build Resilience in Children and Adolescents?

Resilience can be seen as a function of developmental experiences that are positioned in a community context. Community factors that may relate to and promote resiliency in youth and families include:

- *Cohesiveness*
 - *Perceptions of safety*
 - *Perceptions of security*
 - *Effective communication*
 - *Placement of the needs of youth as a priority*
- Relationships, resources, and commitment must be provided.
- *Creation of a "disaster system of care"* (Schreiber, 2000) in which multiple systems of care share understanding of children's needs in events, develop emergency response plans that consider their psychological impact (such as evacuation plans, plans to reunite parents and children)

When agencies develop a comprehensive collaborative approach in the community to disaster and terrorism, services can be applied more efficiently and can more easily reach those in need

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in a timely manner. For example, communities could develop a common shared triage system, and, with parental consent, triage information could be shared to rapidly locate and offer emergency mental-health and long-term care to those most at risk. One such pilot system (PsySTART-www.psystart.org) has been developed (Schreiber, 2001).

Where Can Concerned Individuals Get Help?

- Concerned family members and friends
- Faith-based organizations
- Self-help and support groups
- Books and other publications
 - Books on building resilience, such as: Brooks, R., & Goldstein, S. (2001). *Raising resilient children*. Chicago, IL: Contemporary Books.
 - Books to help children master situations, such as: Holmes, M. (2000). *A terrible thing happened*. Washington, DC: Magination Press.
 - Books to help children cope with terrorist attacks, such as La Greca, A. M., Seven, S., & Sevin, E. (2001). *Helping America cope* (a parent-child workbook for helping children). Available in English and Spanish: www.Sevendippity.com.
 - A licensed mental health professional, such as a psychologist (if adult or child feels that additional help is needed)

What Are Some Organizations That Have Programs for Addressing Resilience and Crisis?

- American Psychological Association: The APA Help Center online at www.helping.apa.org and its national consumer information toll-free line (1-800-964-2000). (APA's brochure on resilience is available to the public.)
- U.S. Department of Education
- National Children's Traumatic Stress Network: Terrorism and Disaster Branch: www.nctsn.org
- Sevendippity, Inc.: Its Web site (www.sevendippity.com) has several materials available free of charge for parents to help children cope with disasters, war, and terrorist attacks. (English and Spanish language versions are available.)
- NYU Child Study Center: Its Web site is www.aboutourkids.org. A manual for parents and teachers is: Goodman, R. F., Gurian, A., Brown, E. J., Cloitre, M., Gallagher, R., Krain, A., Schwartz, S., Spitalny, K. C., & Wallace, S. (2002).

Caring for kids after trauma and death: A guide for parents and professionals. New York: NYU Child Study Center.

- *Keeping children safe*, a school-based manual for children coping with community violence (www.keepingchildrensafe.com)
- The Federal Emergency Management Agency (National Security Emergencies): It sponsors an online disaster lesson for children (www.fema.gov/kids).
- American Red Cross: American Red Cross Masters of Disaster materials (weather events and terrorism) (www.redcross.org)
- Families and Work 9-11 as History program (www.familiesandwork.org)

Conclusion

Resilience can be taught and developed before, during, and after a terrorist event. This fact sheet identifies components of resilience to aid in managing ongoing stress and to promote positive child and family adaptation prior to a traumatic event. The intent is to help children to be more resilient and to focus on probability rather than possibility. It is possible that all kinds of horrific terrorist events could occur. The probability is that they will not and that most people will be fine. Supportive parents and friends are essential for helping children and adolescents build resilience, but they do not have to do so alone. Schools as well as other organizations stand ready to partner with parents in helping children to build resilience and to cope with the aftermath of any terrorist or traumatic event.

Additional Resources

Getting help when it is needed is an important aspect of taking care of oneself, and it can also contribute to resilience. In addition to turning to family members and friends for assistance, a person can take other helpful actions, including joining community support or self-help groups, reading books about how others have successfully managed hardships and challenges, and gathering related information on the Internet (though quality can vary by source).

One online resource that may be a good place to start is the **APA Help Center at www.APAHelpCenter.org**.

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References

Alpert, J. A., & Duckworth, H. D. (in press). Terrorism, terrorism threat and the school consultant. *Journal of Educational and Psychological Consultation*.

APA Task Force on Resilience (2002). *The road to resilience*. Washington, DC: American Psychological Association.

Ayalon, O., & Waters, F. S. (2002). The impact of terrorism on Jewish Israel: An interview with Ofra Ayalon. *Journal of Trauma Practice, 3 & 4*, 133-154.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*, 747-755.

Brooks, R., & Goldstein, S. (2001). *Raising resilient children*. Chicago, IL: Contemporary Books.

Butler, L. D., Koopman, C., Azarow, J., Desjardins, J. C., Seagraves, D., McCaslin, S., Hastings, T. A., & Spiegel, D. (2002, November). *Predictors of distress and resiliency following the tragedy of 9/11/01*. Paper presented at the annual meeting of the International Society of Traumatic Stress Studies (ISTSS), Baltimore, MD.

Carver, C. S., & Scheier, M. F. (1987, August). *Dispositional optimism, coping and stress*. Paper presented at the annual meeting of the American Psychological Association, New York.

Cauce, A. M., Reid, M., Landesman, S., & Gonzales, N. (1990). Social support in young children: Measurement, structure, and behavioral impact. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 64-94). New York: John Wiley.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*, 310-357.

Compas, B. E., Malcarne, V. L., & Fondacaro, K. M. (1988). Coping with stressful events in older children and young adolescents. *Journal of Consulting and Clinical Psychology, 56*, 405-411.

Discovery Health Channel and APA Practice Directorate. (2002). *The road to resilience*. Washington, DC: American Psychological Association.

Dohrenwend, B. P., & Dohrenwend, B. S. (1981). Socioenvironmental factors, stress, and psychopathology. *American Journal of Community Psychology, 9*, 129-146.

Garbarino, J. (1999). *Lost boys: Why our sons turn violent and how we can save them*. New York: Free Press.

Goodman, R. F., Gurian, A., Brown, E. J., Cloitre, M., Gallagher, R., Krain, A., Schwartz, S., Spitalny, K. C., & Wallace, S. (2002). *Caring for kids after trauma and death: A guide for parents and professionals*. New York: NYU Child Study Center.

Gurwitch, R. H., Sitterle, K. A., Young, B. H., & Pfefferbaum, B. (2002). The aftermath of terrorism. In A. M. La Greca, W. S. Silverman, E. M. Vernberg, & M. C. Roberts (Eds.), *Helping children cope with disasters and terrorism* (pp. 327-358). Washington, DC: American Psychological Association.

Hobfoll, S. E., Spielberger, C. D., Breznitz, S., Figley, C., Folkman, S., Lepper-Green, B. et al. (1991). War-related stress: Addressing the stress of war and other traumatic events. *American Psychologist, 46*, 848-855.

Holahan, C. J., & Moos, R. H. (1985). Life stress and health: Personality, coping, and family support in stress resistance. *Journal of Personality & Social Psychology, 49*, 739-747.

Holmes, M. *A terrible thing happened*. Washington, DC: Magination Press. (year?)

Klingman, A. (2002). Children under stress of war. In A. M. La Greca, W. S. Silverman, E. M. Vernberg, & M. C. Roberts (Eds.), *Helping children cope with disasters and terrorism* (pp. 359-380). Washington, DC: American Psychological Association.

Klingman, A., & Kupermintz, H. (1994). Response style and self-control under Scud missile attacks: The case of the sealed room situation during the 1991 Gulf War. *Journal of Traumatic Stress, 7*, 415-426.

Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality & Social Psychology, 37*, 1-11.

La Greca, A. M., Silverman, W. K., Vernberg, E. M., & Prinstein, M. J. (1996). Symptoms of posttraumatic stress in children after Hurricane Andrew: A prospective study. *Journal of Consulting and Clinical Psychology, 64*, 712-723.

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Lazarus, A., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). *The construct of resilience: A critical evaluation and guidelines for future work*. New York: W. W. Norton & Company, Inc.

Lyons, J. A. (1987). Posttraumatic stress disorder in children and adolescents: A review of the literature. *Developmental and Behavioral Pediatrics, 8*, 349-356.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227-238.

Meichenbaum, D. (1985). *Stress inoculation training*. New York: Pergamon Press.

O'Leary, V. E. (1998). Strength in the face of adversity: Individual and social thriving. *Journal of Social Issues, 54*, 425-446.

O'Leary, V. E., & Ickovics, J. R. (1995). Resilience and thriving in response to challenge: An opportunity for a paradigm shift in women's health. *Women's Health: Research on Gender, Behavior, and Policy, 1*, 121-142.

Prinstein, M., La Greca, A. M., Vernberg, E. M., & Silverman, W. K. (1996). Children's coping assistance: How parents, teachers, and friends help children cope after a natural disaster. *Journal of Clinical Child Psychology, 25*(4), 463-475.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry, 57*, 316-331.

Sagy, S., & Dotan, N. (2001). Coping resources of maltreated children in the family: A salutogenic approach. *Child Abuse and Neglect, 25*, 1463-1480.

Schreiber, M. D. (2000). *Children's emergencies in disasters: Disaster systems of care, rapid triage and consequence management*. Paper presented at the 2nd Annual Emergency Medical Services for Children Conference. Baltimore, Maryland.

Schreiber, M. D. (2001). *PsySTART: Rapid triage and mental health incident management for children in mass casualty events*. Manuscript prepared for Emergency Medical Services for Children, Rockville, Maryland.

Schreiber, M. D. (2002). *The impact of weapons of mass destruction on children*. Paper presented at the annual meeting of the California Injury Prevention Conference, Sacramento, California.

Schuster, M. A., Stein, B. D., Jaycox, L. H., Collins, R. L., Marshall, G. N., Elliott, M. N. et al. (2001). A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New England Journal of Medicine, 345*, 1507-1512.

Silver, R. C., Holman, A., McIntosh, D. N., Poulin, M., & Gil-Rivas, V. (2002). Nationwide longitudinal study of psychological responses to September 11. *Journal of the American Medical Association, 288*, 1235-1244.

Silver, R., & Wortman, C. B. (1980). Coping with undesirable life events. In J. Garber & M. P. Seligman (Eds.), *Human helplessness: Theory and applications* (pp. 279-340). San Diego, CA: Academic Press.

Silverman, W. S., & La Greca, A. M. (2002). Children experiencing disasters: Definitions, reactions, and predictors of outcomes. In A. M. La Greca, W. S. Silverman, E. M. Vernberg, & M. C. Roberts (Eds.), *Helping children cope with disasters and terrorism* (pp. 11-33). Washington, DC: American Psychological Association.

Taylor, S. E., Falke, R. L., Mazel, R. M., & Hilsberg, B. L. (1988). Sources of satisfaction and dissatisfaction among members of cancer support groups. In B. H. Gottlieb (Ed.), *Marshalling social support* (pp. 187-208). Newbury Park, CA: Sage.

Veenema, T. G., & Schroeder-Bruce, K. (2002). The aftermath of violence: Children, disaster, and posttraumatic stress disorder. *Journal of Pediatric Health Care, 16*, 235-244.

Vernberg, E., & Vogel, J. (1993). Part 2: Interventions with children after disasters. *Journal of Clinical Child Psychology, 22*, 485-498.

Wiebe, D. J. (1991). Hardiness and stress moderation: A test of proposed mechanisms. *Journal of Personality and Social Psychology, 60*, 89-99.

Yule, W., Udwin, O., & Bolton, D. (2002). Mass transportation disasters. In A. M. La Greca, W. K. Silverman, E. M. Vernberg, & M. C. Roberts (Eds.), *Helping children cope with disasters and terrorism* (pp. 223-240). Washington, DC: APA Books.

The Fostering Resilience series is a product of the APA Task Force on Resilience in Response to Terrorism. Each fact sheet is designed as a resource for psychologists working to promote resilience among a variety of target populations.

Psychologists are encouraged to refer clients and members of the public to the APA Practice Directorate's online Help Center (www.APAHelpCenter.org) and such resources as The Road to Resilience (www.APAHelpCenter.org/resilience).



Appendix A: Should a Traumatic Event Occur

What Is Trauma Exposure?

Trauma exposure refers to the degree to which an individual experiences, witnesses, or is confronted with actual or threatened death or serious injury to self or others. In general, a "dose-response" relationship has been identified between extent of trauma exposure and level of resulting symptoms, with the greater the exposure, the more severe the disturbance.

In addition, characteristics of the individual and of the event also contribute to understanding short- and long-term outcomes (King, King, Fairbank, Keane, & Adams, 1998). However, in this media age, it appears that even vicarious exposure through watching television coverage of traumatic events can be highly stressful. Studies indicate that the amount of time children and adolescents spent viewing television coverage of the Oklahoma City bombing of the Federal Building was positively associated with their degree of reported distress (Pfefferbaum et al., 2001). Given this observation, parents may want to limit their own and their children's exposure to television coverage of traumatic events.

Who Is At Risk for Terrorism-Related Stress?

In general, risk can be seen as a function of the degree of exposure to horror of the event and its aftereffects, the level of actual loss or threat of loss, and the quality of available resources. Children and adolescents who are most at risk for terrorism-related stress include:

- Children directly exposed to the event and/or those with family members killed or injured
- Children whose family members are at high risk, because of their responding to the event
- Children who may be potential targets for backlash to terrorism (i.e., children of Middle Eastern descent)
- Children with few friends, particularly those who have been bullied at school
- Children with previous life traumas (i.e., abuse, witness to domestic violence, divorce)
- Children with a history of mental health and/or behavioral problems

- Children experiencing other recent major life stressors
- Children who are socially isolated

What Are Youngsters' Short-Term Reactions to Stressful/Traumatic Events?

Although most children are resilient in the aftermath of traumatic events, it is important to understand how children may respond to such events and to understand that these responses are "normal" responses to "abnormal" events.

General Reactions Seen in Children and Adolescents

- Increased fears or worries related to personal safety and the safety of others
- Concerns about reoccurrence of the event
- Repeated questions and/or story telling related to the event
- Sleep difficulties (including troubles falling asleep and nightmares)
- Changes in appetite
- Changes in behavior
 - Increased irritability
 - Decreased attention
 - Decreased concentration
 - Increased oppositional and defiant behaviors
 - Increased impulsivity
- Mood swings, depression
- Hateful or hurtful talk (or play)
- Withdrawn behaviors
- Decreased enjoyment in activities
- Decreased school performance
- Hypervigilance and increased startle response

Children's age and developmental level may also influence reactions. In addition to the above reactions, reactions related to the age of the child are listed below.

Infants and Toddlers (age 3 years and under)

- Excessive crying with difficulty being consoled
- Searching for parents/caregivers
- Increased clinging behavior, separate from stranger anxiety



- Change in sleep and eating habits
- Regressive behavior (e.g., thumb sucking, wetting)
- Repetitive play or talk

Preschoolers and Young Children (ages 3 to 5 years)

- Fear of separating from parents/loved ones
- Increased clinging behaviors
- Increased temper tantrums or irritable outbursts
- Sleep disturbance (e.g., wanting to be with parents, generalized nightmares)
- Regressive behaviors (e.g., wetting, thumb sucking, baby talk)
- Withdrawal
- Increase in fears (in general: dark, monsters, etc.)
- Repetitive play or talk about the event

Note. Young children (infants-age 5 years) may be more strongly affected by the reactions of parents or other adults than school-aged children and adolescents.

Children Ages 6 to 11 Years

- Regressive behaviors
- Anger, fighting, irritability, bullying, blaming
- Denial/avoidance/withdrawal/social isolation
- Inability to concentrate and focus
- Fears, depression, anxiety, panic (i.e., mood swings)
- Physical complaints (stomach, headaches)
- Self-blame
- School refusal

Adolescents Ages 12 to 17 Years

- Responses may be similar to adults and trauma-specific
- Depression, suicidal thoughts, guilt/shame
- General anxiety, panic attacks, dissociation
- Numbing, reexperiencing
- Mood swings, irritability
- School refusal (or academic decline)
- Concentration difficulties
- Fears: usually event related (e.g., planes, death)

- Anger/resentment/loss of trust in adults
- Sleep and appetite changes
- Withdrawal (is quiet and/or isolates self) from peers, family, teachers, coaches
- Physical complaints
- Substance abuse or other risk-taking behaviors

Although these reactions are common, children generally move toward recovery. The course and timelines may vary, but usually there is healing. (For a more detailed and exhaustive list of reactions likely seen in children, see www.apa.helping.org).

When Should Parents Be Concerned About Their Child or Adolescent?

Parents, caregivers, and teachers should be concerned about their child or adolescent and consult with a mental health professional, such as a psychologist, if:

- Symptoms persist over a month or more
- Symptoms get worse over a month's time
- Symptoms significantly interfere with school, activities, or family and peer relationships (at any time)
- Children or teens who appeared to be fine suddenly show symptoms (i.e., sleeper effect)
- There is a fascination with death and dying
- There is a concern related to substance abuse or other risk-taking behaviors

References

King, L. A., King, D. W., Fairbank, J. A., Keane, T. M., & Adams, G. A. (1998). Resilience-recovery factors in posttraumatic stress disorder among female and male Vietnam veterans: Hardiness, postwar social support and additional stressful life events. *Journal of Personality and Social Psychology, 74*, 420-434.

Pfefferbaum, B., Nixon, S., Tivis, R., Doughty, D., Pynoos, R., Gurwitch, R. H., & Foy, D. (2001). Television exposure in children after a terrorist event. *Psychiatry, 64*, 202-211.