

Factors Affecting Resiliency in Childhood Exposure to War and Terrorism:  
An Assessment Protocol for Working Clinicians

Daniel Kaushansky

A Dissertation Submitted to the Faculty of  
The Chicago School of Professional Psychology  
In Partial Fulfillment of the Requirements  
For the Degree of Doctor of Psychology

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2012

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## **Abstract**

### **Factors Affecting Resiliency in Childhood Exposure to War and Terrorism: An Assessment Protocol for Working Clinicians**

Daniel Kaushansky

This dissertation examines the multiple factors that influence psychological resiliency in children and adolescents who experience traumatic effects from growing up in a warzone. It is suggested that children will develop such resilience depending on a number of mediating factors including personal characteristics, the presence of support networks, parenting style, availability of cultural mores and healing practices, and other “protective shields.” Utilizing this information, I share a working predictive model of resiliency (in the form of an assessment protocol) for working clinicians to employ when assessing the psychological needs of such children and adolescents. The dissertation is composed of a quantifiable self-report and semi-structured interview questions (coupled with a cumulative meaningful system of scoring) to not only help determine an overall value of potential resiliency but also, in relation to the levels of current symptomatology, traumatic experience and current and potential protective factors.

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## Chapter 1: Introduction

Based on a 2006 UNICEF report, it is estimated that wars in the last decade have killed an estimated two million children, have left another six million disabled, 20 million homeless, and more than one million separated from their parents. Since many of these modern wars are now fought within states and involve non-state actors, such as rebel or terrorist groups, these groups are less likely to abide by humanitarian laws providing protection for civilians. As a result, the basic fabric that supports a child's healthy development is ruptured; and, as family and extended social network ties are severed, social services are interrupted, and ethnic and political divides occur. Additionally, between 80% to 90% of those who die or are injured in conflicts are civilians—mostly children and their mothers. For those who do survive, the shame and loss of self-confidence associated with such events may enhance the children's vulnerability to posttraumatic stress disorder (PTSD), depression, and a variety of trauma related problems (Betancourt & Khan, 2008).

Though psychologists began to express interest in the 1940s, the study of the psychological impact of war on children is a relatively recent phenomenon. Interest originally arose partially as a result of the increased number of world arenas in which armed conflict extended its parameters to include children and adolescents, particularly in Southeast Asia, the Middle East, and South Africa (Baker, 1990). Despite increasing discussion and research, the issue is often minimally addressed or even unrecognized to this day (Schaal & Elbert, 2006).

One of the most devastating events children and adolescents in warzones experience is the loss of family and relatives. All too often, children directly witness a relative's death or have someone lost in their family who plays a vital role in the child's life. If the family is lucky enough to have all members survive, mass population displacements and the general breakdown of the social fabric of the community plague them. In the case of the Balkan war in the early 1990s, 385,000 individuals were displaced—32% of those being children and adolescents. Being displaced to other cities or refugee camps, many parents are unable to find employment and the families end up in poverty, with a poor school system for their children, if there is one at all. Physical health problems further impact the family's life. Due to a lack of food and medical care, there is an impingement on the child's physical development; many children have teeth that are decayed or cracked, and since food is often scarce, children exhibit food-hoarding behaviors. Additionally, grief, detachment, and clinging behaviors are common (most likely a coping tool to deal with the stressful environment) and children of all ages have lingering nightmares about the war, despite being in a refugee camp or distant city (Meier, 2003). Based on this information, it is clear that the lives of even well-adjusted and problem-free children are tremendously affected by living in an armed conflict region.

In spite of these extreme and often overwhelming circumstances, some children display resilience, and they are able to overcome the negative effects of war exposure and cope successfully with the harrowing experiences, successfully averting the negatively based long-term trajectories. This dissertation will investigate the concept of resilience

while critically analyzing the risk and protective factors associated with children who develop resilience in wartime. Once these factors are decisively assessed, a protocol for predicting resiliency potential can be developed for working clinicians to utilize.

## Chapter 2: The Nature of Childhood War Trauma

### What Is Trauma?

Beyond the risk of physical injury, medical problems, and general grief, the psychological traumas children face are often multiple, chronic, and severe. As Judith Herman writes in her seminal book, *Trauma and Recovery* (1992), “Traumatic events involve threats to life or bodily integrity, or a close person encounter with violence and death” (p. 33). As will be critically analyzed in depth throughout this dissertation, research suggests that childhood trauma can have a lasting impact on several facets of a child’s development, including cognitive, moral, and personality development, interpersonal relationships, and coping abilities (Barenbaum, Ruchkin, & Schwab-Stone, 2004). Before examining the differing definitions and conceptualizations of trauma over the past few decades, one should first be aware of the empirical literature on what experiences qualify as particularly traumatic, and why. According to Janoff-Bulman (1989), highly traumatic events and experiences are those that are unexpected, deprive individuals of control, and evoke feelings of helplessness and inescapable submission; all emotions that shatter the human notions of security, invulnerability, and the belief that the world is a safe, fair, and just place. As echoed in the *Comprehensive Textbook of Psychiatry* (1985), the common denominator of psychological trauma are feelings of intense fear, helplessness, loss of control, and threat of annihilation.

Taking the somber significance of these characteristics into account, what then ensues when an individual experiences a traumatic event? According to Herman (1992), the typical human response to the danger and impending threat is a multifaceted, yet

integrated system of reactions, encompassing both mental and physical capacities. In a classic threat based situation, an individual's sympathetic nervous system is aroused, causing an adrenalin rush and a state of increased alertness. Ordinary perceptions are altered and feelings of pain, fatigue, and hunger are often mitigated or even disregarded; intense feelings of anger and fear are evoked. Such changes in arousal, attention, perception, and emotion are not only normal, but also evolutionarily adaptive. The threat and fear causes an individual in danger to focus their attention on the immediate situation and either choose a flight or fight reaction. Traumatic reactions then occur when the flight or flight action is of no benefit. As Herman (1992) writes, "When neither resistance nor escape is possible, the human system of self-defense becomes overwhelmed and disorganized" (p. 34).

Not only do traumatic events sever the normally integrated functions of physiological arousal, attention, perception, and emotion from one another, they produce profound and lasting changes. For example, traumatized individuals may have little clear memory of an event but will experience excessive emotion when discussing it, or alternatively, may be able to recount the event in great detail without any emotional response. This is what trauma does—it ruptures the fabric of a seamless system of self-protection that is evolutionarily assumed to function in an integrated fashion. Such a system is then put on what seems like permanent alert, as if another traumatic experience could occur at any moment.

As expressed by the American Psychiatric Association (1987), traumatic events were defined as those events that were "outside the range of usual human experiences"

(p. 253). However, given the substantial number of people affected by war over the last century, as well as the everyday violence that occurs towards many women and children, this stipulation was challenged by numerous writers (Brown, 1991; Herman, 1992) and consequently taken out in the DSM-IV-TR. Moreover, as discussed by Garbarino, Kostelny, and Dubrow (1991), for children who grow up in areas where they are repeatedly forced to confront violence, such as those living in impoverished and low SES communities of major American cities, the trauma becomes a central component of their lives, with no defined beginning and end. This type of understanding has motivated some scholars (Herman, 1992), to make the case for “complex PTSD,” a diagnosis reflecting the chronicity of some traumas. In another type of conceptualization, as proposed by Terr (1991), trauma was conceptualized of being either two types: type I or type II. Each type demands specific responses, coping processes, and adaptation skills. Type I trauma refers to a one-time, horrific and clear-cut life-endangering experience. Examples of these types of experiences include witnessing killing, being wounded, or experiencing destruction of the home. Type II trauma refers to chronic stress and adversities that are part of a child’s daily life; for example, living in a war zone itself or areas of grave poverty and social inequality, such as “ghettos” of many large cities (as mentioned earlier).

In comparison to previous, arguably uncomplicated definitions of trauma, Yehuda and McEwen (2004) classified traumatic experiences according to several facets of the individual’s traumatic experience: physical and emotional proximity to the event, the frequency, and the content of the experience. It should be noted that while their conceptualization was in the context of a psychoneuroendocrinological perspective, it is

within this framework that the vast majority of subsequent understandings are based upon.

Further research amassed by Pine, Costello, and Masten (2005) suggests that traumatic experiences can be placed on a continuum, based on the degree to which a child is exposed directly to the extremely frightening and prolonged stressors that carry long-term impact on personal well-being or access to social supports. Extreme traumas can be classified as those that involve a high degree of threat targeted directly at the child or adolescent over a long period of time and consequently produce the loss of social supports (such as family members or friends); for instance, witnessing a period of prolonged violence directed toward a parent, which eventually concludes with the parents' death. Mild traumas would be classified as those that involve exposures that are brief duration, produce an increase in the availability of social support, or are only mildly threatening; brief exposure to inter parental arguments that results in divorce would be one example (Pine et al., 2005). These two latter conceptualizations seem more widely accepted and utilized in today's trauma and Post Traumatic Stress Disorder assessments.

Given the relative empirical acceptance of such models, specific factors such as developmental age, gender differences, the proximity to events, parental coping styles or reaction, the duration of symptoms, and support networks, are all pertinent in determining the amount of trauma induced by an event.

### **Chapter 3: The Effects of Trauma**

As developmental literature makes clear, children are most susceptible during traumatic events as they are regularly going through sensitive periods of their cognitive, emotional, and endocrinological development. War exposed children often experience repeated, uncontrollable, and unpredictable affronts on to their sense of safety, both physical and emotional. Accordingly, the multiple facets of the impact of such experiences should be addressed.

#### **Physiological Response and Change**

Physiologically, a multitude of neurophysiological and neurobiological changes occur in response to trauma. As Perry, Pollard, Blakely, Baker, and Vigilante (1996) poignantly discuss, a child who has been traumatized in some shape or form is likely to develop “sensitization,” a focal resulting phenomenon of the traumatic experience. By definition, “sensitization” is an altered neural response that results from a specific pattern of repetitive neural activations or experiences. Such experiences activate neurosensory apparatuses, altering the quantity and pattern of neurotransmitter release throughout the neuronal systems responsible for perception, sensation, and the processing of that experience.

Once a response is sensitized, the activation of the specific pathway can be elicited by decreasingly intense external stimuli. Consequently, traumatized children demonstrate profound sensitization of the neural response patterns related to their traumatic experiences, resulting in full-blown dissociation or hyperarousal elicited by



subjectively minor stressors. For example, if a child faces a threat and responds normatively with a hyperaroused response, there is a substantial increase in the locus coeruleus (the “fight or flight” mediator) and ventral tegmental nucleus activity. Following the acute fear response, however, these brain systems will be continually reactivated when the child is exposed to a reminder of the traumatic event, or simply thinks or dreams about the experience.

With time, the reminders may generalize, meaning that despite the trauma becoming increasingly distant, the child’s brain is continually exposed to the stress-response cycle. Previously minor stressors will now elicit exaggerated reactivity, and the child will become oversensitive and hyperreactive.

As Perry et al. (1996) point out, it is unfortunate that such reactivity or lack of efficacy is often mistakenly labeled by others as oppositional defiant behavior. For example, traumatized children who have developed a sensitized hyperarousal system will often “freeze” when they become anxious. Often not comprehending the basis of their anxiety, they often feel a loss of control and will cognitively, though often physically, freeze. Thus, when adults or other authority figures (most likely teachers) ask them to comply with directions, they may not respond, or even refuse. A subsequent directive, most likely involving a nuance of threat or a blatant threatening statement (e.g. “if you don’t...then I will...”), creates a further buildup of anxiety and out of control feelings in the child. The quicker the rise in anxiety, the earlier the child will move to feeling threatened, and eventually, terrorized. It is at this final point that the child’s freezing behaviors escalates to complete dissociation.

Related to process of sensitization, the loss of the normal inhibitory modulation of the startle response has been demonstrated in children with PTSD. Differences in circadian rhythm and activity level in abused children have been established as well. Additionally, some studies have concluded that there is a large increase in neurotransmitter activity associated with severe and prolonged stress in children that may affect the development of the brain, placing them at risk for developmental disorders (Pfefferbaum, 1997).

### **Behavioral Changes**

Common behavioral reactions and symptoms in the aftermath of a traumatic event include a host of problems including, sadness, anger, fears, numbness, feeling jumpy or jittery, change in appetite, moodiness or irritability, nightmares, difficulty sleeping, avoidance of situations that are reminders of the trauma, impairment of concentration, and guilt because of survival. It should be noted that these symptoms do not necessarily all appear simultaneously. Intrusion symptoms such as fears and nightmares may develop early as an acute response among people being in a continuous state of anxiety, while the avoidance symptoms may develop later, or in response to only certain types of traumatic events (Thabet, Tawahina, Sarraj, & Vostanis, 2008).

### **Psychological Impact**

War and traumatic experiences greatly intensify the challenge of a child's psychological development. As Alkhatib, Regan, and Barrett (2007) discuss, an

examination of such detriments from the perspective of Erikson's psychosocial stages is fitting. Alkhatib et al. (2007) determined that basic trust (the first stage encountered) is particularly difficult when parents are psychologically unavailable (as they are often victims of war and trauma themselves). Additionally, growing up in a warzone disrupts attachment relationships and leads to emotional exhaustion due to the repetitive exposure to fear. Consequently, regression is a common response among affected children, with associated toileting, speech problems, irritability, sleep difficulties, and frequent illnesses. At the preschool age, children need to become confident about testing the limits of their individual freedom and group responsibility, or of fantasy and reality; intellectual skills also become increasingly complex and language is mastered. However, war often undermines this process by disrupting culturally normal relationships and dramatically altering normative social structures. As a result, children affected at this stage typically exhibit their initial responses through worry and anxiety, often displayed as clinging behaviors, sleep difficulties, and temper tantrums. Finally, during the school age, where children should be learning academic and social skills, traumatic experiences provokes regression and behaviors typically associated with PTSD, such as a preoccupation with the traumatic event(s), nightmares, hyperarousal, withdrawal or avoidance, and aggressive behaviors. Connected to such symptoms are prolonged fears of being alone, a preoccupation with danger, and safety concerns. Further, academic-related difficulties and issues are common, including school refusal, defiant behaviors, and an inability to concentrate on the work at hand.

## **Posttraumatic Stress Disorder**

Children exposed to war atrocities often experience clinically significant levels of re-experiencing the event, avoidance or numbing, and hyperarousal symptoms, which together make up the syndrome of posttraumatic stress disorder, or PTSD (Husain, Allwood, & Bell, 2008). There is also evidence that perceived level of life threat and the number of previous traumatic experiences are particularly pertinent for the potential development of PTSD. Furthermore, various types of traumas relate differentially to PTSD and other mental health outcomes, such as depression and mood disorders (Barenbaum et al., 2004).

In her comprehensive literature review on PTSD, Pfefferbaum (1997) notes that the expanse of knowledge over the last decade, of the phenomenology of PTSD in children, has been dramatic. She notes that, like many conditions, the recognition of PTSD in children has lagged behind its recognition in adults. According to the American Psychiatric Association (1994), the estimated lifetime prevalence of PTSD in the general population ranges from 1% to 14%. However, among high-risk groups whose members experienced traumatic events, the lifetime prevalence rates range from 5% to 75% (Kaplan & Saddock, 2007). As mentioned above, the essential feature of PTSD is the development of characteristic symptoms after a traumatic event. These symptoms comprise three clusters: 1) persistent re-experiencing of the stressor; 2) persistent avoidance of reminders of the event and numbing of general responsiveness; and 3) persistent symptoms of arousal, such as difficulty falling or staying asleep, irritability or outbursts of anger, and difficulty concentrating. Individuals with PTSD may also describe

dissociative states, panic attacks, illusions, and hallucinations (Kaplan & Saddock, 2007). In children, psychosomatic symptoms and repetitive play involving the event may occur. To be diagnosed, the symptoms must cause clinically significant distress or impairment in functioning and must endure for more than one month. While most symptoms begin within three months after the stressor, symptom formations have been known to be delayed for months or even years (American Psychiatric Association, 1994).

Unlike general trauma, the role of gender on PTSD is clearer: Lifetime prevalence ranges from about 10 to 12 percent among women and 5 to 6 percent among men. As well, a familial pattern seems to exist for PTSD and first-degree biological relatives of persons with a history of depression have an increased risk for developing the disorder following a traumatic event. Regarding comorbidity, two-thirds of individual clients with PTSD have at least two other disorders. Common comorbid conditions include depressive disorders, substance related disorders, other anxiety disorders, and bipolar disorders.

One important issue of diagnosis is that partial symptomology is common, and may be functionally disabling even if the full criteria is not met. Therefore, when considering treatment in children, it is important to inquire about all symptoms in each cluster as the full symptom complex may develop late and may disrupt development (Pfefferbaum, 1997).

Regarding course and prognosis, symptoms of PTSD typically fluctuate over time and may be most intense during periods of stress. Untreated, about 30 percent of individuals recover completely, while 40 percent continue to have mild symptoms, 20 percent have moderate symptoms, and 10 percent's symptoms remain unchanged or

become worse. A positive prognosis is predicted by a rapid onset of the symptoms (less than six months), good premorbid functioning, strong social supports, and the absence of other psychiatric, medical, or substance-related disorders (Kaplan & Saddock, 2007).

### **Cognitive Effects of PTSD and Traumatic Experiences on Children**

As already touched upon, children are particularly susceptible to neurological and behavior development problems as a result of encountering a traumatic experience. New research, however, has also examined the cognitive detriments imposed by PTSD or childhood trauma. In a study by Elbert et al. (2009), neurological and school performance in school children with PTSD were examined. Not only did scores on memory tests and school grades demonstrate significant impairment of cognitive development, memory performance was positively correlated to the number or variety of traumatic experiences endured. In addition to reduced memory performance, traumatized children performed less well in language skills; math and physical abilities on the other hand, were not affected. In revisiting the earlier statement about maintaining cognoscente of potential PTSD without the full criteria being met, the sample in this study with the highest class of traumatic experiences demonstrated impairment irrespective of whether or not the full PTSD criteria had been fulfilled (Elbert et al., 2009).

Attention problems and ADHD, marked by a combination of extreme inattention, impulsivity, and hyperactivity, have also been exhibited in children with PTSD. It has been hypothesized that since children in war zones must maintain prolonged states of hyperarousal and hyperalertness to guard against the imminent dangers associated with

war, this may counter efforts to sustain attention to other tasks, such as academic work. Studying Sarajevan children in the midst of the Bosnian war, Husain et al. (2008) found that because of similarities in the arousal systems of PTSD and the hyper-inattentive symptoms of ADHD, PTSD symptoms mediated the relationship between trauma exposure and attention problems. Additionally, the relationship between trauma symptoms and attention problems were strongest when both type of symptoms were reported.

## Chapter 4: Factors Impacting the Level of Trauma

### Developmental Age Level

In stark contrast to the relatively conclusive research on some factors pertaining to the traumatic reactions of children and adolescents, studies concerning age are inconsistent, and without even general agreement that children of certain ages handle traumatic experiences better than others. Some research, such as that of Leavitt and Fox (1993), has found that younger children are more susceptible to posttraumatic stress, anxiety, and other reactions than older children. In another study by Jensen and Shaw (1993), it is suggested that older children and adolescents have developed a more sophisticated array of coping abilities than younger children. Thus, younger children are consequently at greater risk since they have not yet mastered the cognitive skills of their older counterparts, commonly attribute egocentric explanations to events, and typically have more difficulty talking about distressful events and experiences.

Other studies have suggested that younger children are better able to handle their experiences. Berman (1999) observed in her qualitative study that younger children more often described their experiences with a sense of bravado and seemed generally less aware of the genuine dangers they faced. For example, in listening to a ten-year-old boy's story about his escape from his home in Somalia, Berman noted that the boy excitedly told how he had outrun the soldier who was pursuing him, with only peripheral mention that he had just witnessed the soldier kill someone a few minutes before. Numerous stories of similar content resonated with other young participants' of Berman's work. In contrast, older children had greater difficulty speaking about the wars in their native



countries since, as they stated, their older age made it more difficult to forget what had occurred. The notion that older children and adolescents may be at greater risk than younger ones also has intuitive appeal, since adolescents are more capable of hypothetical and abstract thought. Further, adolescents are better able to fully grasp the possibilities and consequences of living in a warzone (Berman, 2001).

Introducing an alternative explanation, Eth and Pynoos (1985) argue that although the manifestation of posttraumatic symptoms differs according to age, the general pattern on responses is similar. The two authors' examinations describe a variety of responses that correspond to children's developmental and cognitive abilities at different stages and conclude that children's efforts to cope with traumatic anxiety and helplessness are a function of maturity. For example, in a study by Zubenko and Capozzli (2002), children's understanding of grief and response to death, by age group, was examined. In the preschool years, illness, loss, and death are viewed as punishment for wrongdoing and the children recognize that the people around them are sad and frightened. Children ages six to nine may associate death and loss with witches, monsters, and mutilation, as well as possess magical thinking. It is then only at the ages of ten to twelve that children realize that death is permanent and fully comprehend the consequences of such loss. A number of studies have also found that there is greater vulnerability in children between the ages of five and nine years of age, as their ability to be aware and process real events is expanding. However, they still lack consolidated identities and higher order defense mechanisms (Garbarino & Kostelny, 1996; Kuterovac-Jagodic, 2003). To counter this relatively neutral hypothesis, Terr (1991) found no notable differences among the

traumatic reactions of children between the ages of five and 14, all of whom had been kidnapped and buried alive in a bus in Chowchilla, California. In any case, several studies have indicated that children's responses across the age-span take the form of regression, including thumb-sucking, baby talk, bed wetting, and needing a transitional object (Joshi & O'Donnell, 2003).

As adolescents, with the burgeoning capacity for abstract thought, they have a greater understanding of war, and a more open fear of death. Thus, acting like adults who internalize their emotions, many of these individuals develop a depressed affect, and may also respond with irritability and defiance (Joshi & O'Donnell, 2003).

## **Gender**

Like developmental age, gender as a determinant of children's responses to war-related traumatic reactions is still an issue of contention among researchers. While several investigators have argued that boys exposed to violence experience higher stress levels than girls and that males are more vulnerable to traumatic stress than females (Elbedour, Bensel, & Bastien, 1993), two individually orchestrated studies (Greenbaum, Erlich, & Toubiana, 1993; Klingman, 1992)—both examining children exposed to the Gulf War—found that females showed a higher frequency of stress reactions than males. Two other investigations (Klingman, Sagi, & Raviv, 1993; Leavitt & Fox, 1993) yielded evidence that girls reported a higher frequency of stress reactions and exhibited greater anxiety and fear than boys. Finally, Berman (1999) reported that female children of war had significantly higher PTSD scores than their male counterparts.

To make sense of these diametrically differing results, one must consider both social and cultural variables. The first variable pertains to differing socialization factors. According to Gilligan (1982), girls are socialized from a young age to openly convey their anxieties, fears, and general emotional responses; boys on the other hand are traditionally discouraged from such overt displays of emotions and are taught to deny, repress, or conceal feelings or emotions of negative connotations. As Berman (2001) then postulates, it is likely that while the levels of distress between both groups may be similar, the levels of PTSD scores reflect differences in cultural expectations moderating the display of emotion, with girls evidently showing higher rates than boys. Studies also show that the expectations of actions based on gender and the protective strategies used when the different sexes deal with traumatic experiences dramatically differ. While female may be more inclined to acknowledge their concerns and emotions more openly (subsequently resulting in higher PTSD score), men are more apt to repress their feelings, and simply take action in other environments—a tactic that is arguably poorer. Culturally, studies of Palestinian children show that boys are more vulnerable to the effects of violence in early childhood while girls' vulnerable period is in adolescence. The authors Leavitt and Fox (1993) hypothesize that the greater politicization of Palestinian boys in later childhood may lead to different coping strategies. Although it will be discussed at length later on, it should be noted that politicization and widely held cultural beliefs are also mediating factors of resiliency in some cultures (most notably, Palestinian children and adolescents).

## **Proximity to Events**

As intuition would guide, the closer in proximity a child is to a traumatic event, the greater the intensity of the stress response and more severe the risk for the development of post traumatic stress disorder. Concurrent with research in adults, a wide swath of studies find a dose-response effect, meaning that the more directly a child or adolescent is in harm's way during a traumatic event or experience, the more severe the risk of PTSD. Moreover, traumatic experiences that transpire during war rarely occur as a one-time phenomenon, with higher cumulative exposure levels being related to higher symptom levels. Macksoud and Aber (1996) studied the correlation between the type/number of war traumas and psychosocial development in Lebanese children, ages 10 to 16. Using the War Trauma Questionnaire, Macksoud and Aber examined ten categories of war exposure. As expected, children who had witnessed violent acts, were exposed to multiple traumatic incidents, or were bereaved, showed higher rates of PTSD symptoms than those who had not viewed such acts. In an additional example, 50 to 80 percent of children who experience forceful threats, such as being tear-gassed, witnessing the beating or murder of their parent(s), or having a near death experience, will show at least some signs of PTSD (Thabet & Vostanis, 2000). Other research has also suggested that children who experience direct injury to themselves, parents, or people they closely associate with are associated with more trauma symptoms (Pine & Cohen, 2002). In one particular study of Israeli children affected by Scud missiles, it was shown that children who lived near or in areas of attacks had more distress and negative emotions, as well as more somatic, cognitive, and daily routine difficulties (Meier, 2003). Chimienti, Nasr,

and Kalifeh (1991) also found that Lebanese children exposed to shelling, death, and/or forced displacement were 1.7 times more likely to develop depression, become aggressive, and manifest regression, than those who were not similarly exposed.

In contrast to direct, personal exposure, the effects of indirect exposure (such as watching a warzone on television) on children appear fairly modest, short-lived, and come with a fairly optimistic prognosis of psychological recovery. As defined by Terr et al. (1999), “Distant trauma: refers to the “reaction (memory, thinking, symptoms) to a disastrous event, experienced at the time of the event, but from a remote and realistically safe distance” (p. 1542). In examining the impact of the Challenger space shuttle disaster on children, Terr et al. categorized the sample into three groups: 1) those who had made the trip to Florida for the launch, many of whom were third grade classmates of astronaut Christa McAuliffe’s son (Christa McAuliffe died in the accident); 2) students from Christa McAuliffe’s home town of Concord, New Hampshire, who watched the explosion live on television; and 3) a group of children on the West coast who heard only later about the explosion. Terr and colleagues found that children who had the closest relationship to McAuliffe and saw the explosion live (regardless of in-person or on TV) tended to show the most traumatic responses, while much less severe PTSD symptoms were observed among the West coast children. In another 2003 study by Pfefferbaum and colleagues, the effects of direct and indirect (e.g., media) exposure to three major terrorist events were explored. Looking at the reactions of children who experienced the Trade Center bombing in 1993, the Oklahoma City bombing in 1995, and the 2001 World Trade Center bombing, the authors concluded that PTSD reaction scores were relatively low in

indirectly exposed cases, with children reporting only minimal changes in daily life. However, in studying the effects of the 2001 World Trade Center bombing among children who lived in the New York area but were only indirectly affected, Hoven, Duarte, and Mandell (2003) discovered that the prevalence of psychiatric disorders in one study was two to three times as higher in New York City students as it was in close by suburban and urban school students tested only one year earlier. While these authors infer that children who are indirectly affected by traumatic events still develop maladaptive psychological reactions, they fail to address the critical evidence that being from the New York metropolitan area, these children were all relatively close in proximity. Furthermore, the tri-state area is a large commuter community. It is likely that many children in the suburban and urban surrounding areas had friends, family, or acquaintances that were somehow connected to the attacks.

In summarizing the above empirical literature, it is clear that the closer in proximity a child or adolescent is to a traumatic event, the more likely they are to develop different types of psychopathology, predominantly posttraumatic stress disorder. That being said, proximity should be conceptualized in a few ways: first and most obvious, physical distance to the zone of impact; second, degree of life threat, such as having oneself, a family member, friend, or acquaintance involved in a traumatic experience; third, being forcefully removed or displaced from one's home; and fourth, the medium through which the traumatic event was experienced (for example, direct witness, television, radio, or story).

## Parental Coping Styles

While many protective mechanisms aid children and adolescents in the face of adversity, one of the more important mediating factors in children's response to traumatic events is their parent's reaction. Early interest in the link between parent's psychological response and their child's response was originally based upon studies by Freud and Burlington, where it was suggested that the emotional state and behavior of the mothers could explain the children's resilience under conditions of war stress (Freud & Burlington, 1943). Since then, research in the area has plentiful in some aspects and lacking in others. Numerous studies have shown that the reactions of mother's to war are readily conveyed, whether intended or not. Early research, such as that by Punamaki and Suleiman (1990) suggested a negative correlation between a mother's internal locus of control and their child's anxiety. Israeli researchers have found that mother's distress symptoms after missile attacks and displacement, are highly correlated with their children in acute stress, as well in six and thirty month follow-up examinations. Likewise, as Bryce, Walker, Ghorayeb, and Kanj (1989) discovered, Lebanese mothers' depression was positively associated with their children's distress, while maternal mental health issues were linked with their children's distress in a Palestinian sample. One caveat of these relatively solid conclusions is the general evidence about the transmission of mental health symptoms between parents and their children, regardless of environment. For example, children of parents with anxiety disorders are more likely to suffer from social withdrawal and anxiety than from other symptoms; similarly, children of depressive parents are at greater risk for depression another other internalizing symptoms (Qouta,

Punamaki, & El Sarraj, 2005). It should also be noted that much of this current research on “parental reactions and support” is actually a euphemism for “mother,” as research with fathers continues to be underrepresented (Phares & Compas, 1992)—certainly one of the limitations of research in the area.

Work by Laor, Wolmer, and Cohen (2001) as well as Laor, Wolmer, Mayes, Gershon, Weizman, and Cohen (1997) later expanded maternal research by examining mother’s personality traits and their consequential methods of processing traumatic experiences. The results showed that a mother’s capacity to form secure object relations, a mature defense style, in addition to good mental health strongly predicted children’s positive psychological adjustment after war trauma. In contrast, research with adult trauma victims verifies that personality characteristics of neuroticism, introversion, and negativism all form risk for depressive symptoms and post-traumatic stress disorder (Qouta et al., 2005). Thus, one could attribute such personality traits as having a negative affect on children’s psychological adjustment during times of adversity.

Well-established findings throughout the literature postulate that positive parent-child relationships are characterized by warm, supportive, and caring parental attitudes; such attitudes are important in influencing the child’s well-being, as well as protecting them in the face of war conflict, political hardship, or economic strife (Masten et al., 1999). Not only does such parenting style enhance a child’s mental health and developmental growth, but is likely to play a key role in the potential development of a child’s resiliency characteristics. With that said, Cairns and Davies (1996) reports that parenting often changes during wartime due to the obvious environmental stressors.



While some findings indicate that parenting is enhanced in wartime, others suggest an increase in authoritarian parenting, with less supervision and emotional interaction. One important conclusion was that of Thabet, Ibraheem, Shivram, Winter, and Vostanis (2009), which found a negative correlation between perceived parental support and exposure to traumatic events; similarly, a significant inverse association between parental support and children's posttraumatic stress reactions was found. In any case, it is clear that parental support and reactions have a moderating effect on their children's mental health. Smith, Perrin, Yule, and Rabe-Hesketh (2001) for example, showed that both the maternal mental health and severity of war trauma accounted for children's anxiety, depressive, and posttraumatic symptoms in families of Bosnia-Herzegovina. Garbarino (1991) also observed that parents who were able to enhance a sense of stability, competence, and permanence to their children, as well as maintain strong positive attachments, were much more likely to witness stronger coping skills in their children during traumatic experiences and events.

The ability for a parental figure to successfully reach out to their family and community for support was also found to be critical in a child's psychological reaction. High levels of family communication, social support, and family cohesiveness have all been found to protect children from the effects of war (Thabet et al., 2009). As Farhood et al. (1993) report, Lebanese families who could rely on social support to deal with problems of various natures were much more confident in their abilities to deal with their children's needs during war time. Similar findings (Compas, Worsham, & Ey, 1992; Pynoos, Steinberg, & Warth, 1995) argue that one of most protective mechanisms for

children's mental health is the ability of a parent to develop a social support network and the establishment of strategies to cope with stressful events. One exception to these relatively established conclusions was a study by Khamis (2005), which used a sample of Palestinian children; no significant difference in parental support was found between children without and with post-traumatic symptoms—instead, family ambiance was found to be a defining factor. While such findings are relatively rare, as will be discussed later, studies with Palestinian samples commonly run against the grain of the majority of findings—such conclusions can be attributed to a number of factors, including notable historical and cultural variables. In any case, a palpable consequence of such research is to enhance parental support networks in helping susceptible children who live in adversarial conditions.

### **Duration of Symptoms**

Similarly to age and gender effects on the experience of a traumatic experience, the issue of the duration of symptoms is still controversial. Some authors contend that the effects of war experiences are enduring, where significant levels of psychological dysfunction and posttraumatic stress are documented years after the traumatic event has occurred. One particularly convincing finding was that of Khmer youths, 48% who displayed trauma related symptoms eight to twelve years after the Cambodian genocide (Kinzie, Sack, Angell, Clark, & Ben, 1989). Dyregro, Gjestad, and Raundalen (2002) also found that the prevalence of posttraumatic stress symptoms in Iraqi children after the Gulf War remained remarkably stable over a two-year period, at approximately 80%.

Conversely, several studies from differing geographic areas find that the majority of children exposed to political or war violence exhibit no negative enduring psychological symptoms, or if they did, such symptoms were transitory (Barenbaum et al., 2004). Surprisingly low rates of posttraumatic stress have been documented in adolescents who have experienced massive psychic trauma due to ethnic cleansing campaigns; follow-up studies have suggested that such symptoms are not indicative of enduring psychopathology and may be fleeting (Becker, Weine, Vojvoda, & McGlashan, 1999). While taking into account these counterintuitive findings, it seems clear that for every study purporting one conclusion, there will be another declaring the opposite.

So why no consensus on what one would think would be a relatively intuitive answer? The differences in the reports of long-term symptoms severity are likely the result of several factors. First, one must look at the number of factors that differed between the studies, such as psychological milieu after trauma, initial short-term symptom severity, and continuity of disruption (e.g., continuing conflicts in family as a result of war, or continued displacement at the time of follow up study). All such differences each have their own tremendous impact on a child's reaction. Second, the child's personality characteristics play a tremendous role in resilience (as will be discussed later). Personality qualities such as emotional and aggressive coping skills, external locus of control, and age of the child have also been found to be predictive of long-term psychological outcomes. Third, the extent of social support seems to mitigate the psychological impact of war over time. Finally, as discussed earlier, a significant amount of distress experienced can be attributed to the age of the child, with their

reaction and coping abilities being directly related to their understanding of the effects such violence means for them and their family (Barenbaum et al., 2004). Jensen and Shaw (1993) also point out that in the context of continuous war activities, stressful events and circumstances may begin to be perceived as normal, everyday realities to which the child may become adjusted, predominantly to children who grow up in no other environment than that of a war zone. The authors also suggest that moderate degrees of war stress exposure can result in adaptive and protective cognitive styles that ensure effective functioning, most successfully if the child is not directly affected by such exposure (i.e., threats made to, or death in, immediate family).

## Chapter 5: Resiliency

Through all types of conflicts, research shows that there is a vast variation in the psychological responses of children and adolescents. While some children unwillingly surrender to the development of psychopathology, most notably posttraumatic stress disorder, some children are able to dodge the encroaching damage, with some individuals even becoming strengthened through the experience—we aptly identify these children and adolescents as “resilient.” That being said, research by Rutter (2000) found it was atypical for more than half of the children who experienced the most severe anxiety and stressors to subsequently develop psychopathology. According to Rutter (2000), the concept of resilience did not command serious academic attention until the 1970s. Until this point, the phenomenon received relatively little attention; individual differences were attributed to somewhat undefined constitutional factors, and the concept itself seemed to be incomprehensible. Further, researchers worried that a focusing too much on successful outcomes following horrifying experiences may sidetrack the attention of policy makers from the need to amply appreciate the reality of psychological injury caused by psychosocial adversity.

All being said, research on resiliency initially began while examining children of schizophrenics during the 1960s and 1970s. In these studies, conducted by Norman Garmezy, it was found that among children who had a high prognosis for future psychopathology (due to their family histories), there was a subset of children who had surprisingly healthy adaptive patterns. Whereas other researchers had dismissed these children as simply atypical, Garmezy and colleagues scrutinized over what factors were

associated with the children's curiously positive outcomes. Throughout the 1970s, several differing descriptions of "resiliency" emerged, with the primary notion being that resilient youth are socially magnetic, are able to relate well to others, and have the ability to experience and regulate a wide range of emotions (Luthar, 2006). During the 1980s, several scholarly articles of importance were written; Rutter's (1987) paper was critical in identifying classes of protective processes for determining resilience, as well as interactive components. For example, it was found that boys reacted more severely than girls to family discord—being female was thus a "protective" factor. Rutter (1987) also shared one of the first discussions on the significance of identifying processes in resilience and outlined methods in which risk effects could be reduced: by shifting the experience of risk itself. For example, altering exposure to risk via strict parental guidelines and supervision in high-risk environments; preparing a child for a hospitalization before said visit; or averting negative chain reactions through harsh discipline methods that perpetuate oppositionality. During the late 1980s and 1990s, several changes in the conceptual approaches to the construct were made, two being particularly important. First, early research hypothesized that resilient children had personal qualities such as autonomy and belief in oneself. However, it was eventually recognized that resilient adaptation likely came from factors external to the individual themselves. Thus, three sets of factors came to be attributed to the development of resilience: internal characteristics of the children, family characteristics, and the larger social environment in which the child resides. The second change regarded notions of the potential fluctuation of resiliency in a child. Early writings suggested that some children

were merely “invulnerable” in spite of any multitude of risks. Later investigations, however, revealed that positive adaptation despite adversity is never permanent and is rather a developmental process. Thus, while a child may display resilience at one time, with time and changing life circumstances come new vulnerabilities and strengths. An added qualifier was that children may seem resilient in regards to their behaviors but may still struggle with depression or anxiety (Luthar, 2006). For example, Hammen (2003) found that among children of depressed mothers, there is an adaptation whereby the child quickly adopts the caretaker role. While such a change may bring about a healthy sense of maturity, it has been found to be false, with negative consequences over time. It was also acknowledged that even considering only domains of behavioral competence, resilience should be considered to be an all or none phenomenon; instead there is domain specificity, with children displaying remarkable strengths in some areas while showing significant deficits in others. By 2000, the construct of resiliency had reached new popularity, reflected not only in the number of academic publications but the wide breadth of at-risk circumstances exemplified, including maltreatment, parental mental illness, community violence, and catastrophic life circumstances (Luthar, 2006).

### **The Concept of Resiliency**

As Rutter (2000) discusses, the theoretical composition and research of “resiliency” has remained somewhat wide, with several lines of exploration and interests. First, and likely most well known, is the idea of resiliency being a positive outcome out of adversity; research investigating this line typically examines factors associated with

the development of social competence, as well as the causes and consequences of self-efficacy. Similar research has focused on the processes and features that differentiate people's responses to traumatic experiences or stress. Second, much attention has been placed on the effects of various positive experiences. For example, research in depression has scrutinized the protective effect of social support. A third area of resilience interest concerns the process by which individuals' abilities are able to cope with adversity and stress. Seminal studies by Murphy (Murphy, 1962; Murphy & Moriarty, 1976) examining coping and mastery drew attention to the large variations in the ways people dealt with personal challenges and threats. Such findings then lead to the differentiation of the tasks involved in dealing with the realistic situations created by challenges, and the corresponding requirement to find effective ways of dealing with the emotions provoked by the life experiences. This research and understanding has been arguably crucial in promoting the idea that there is a substantial range of effective coping mechanisms, that coping styles for one type of traumatic experience may not work in other settings, and that there are considerable differences in each individual's coping style (Rutter, 1987). Overall, resiliency research has demonstrated that individuals are not simply passive as adversity and stress are placed upon them. On the other hand, people are active in the way they interact, cope, and are affected by their environment during such difficult times (Rutter, 2000).

Presently, resilience is defined as “a phenomenon or process reflecting relatively positive adaptation despite experiences of significant adversity or trauma” (p. 742) (Luthar, 2006). Since the construct is composed of two distinct dimensions—significant



adversity and positive adaptation—it can only be inferred based on evidence of the two constructs, rather than measured directly. Considering these two components individually, risk is defined as a correlate with statistical probabilities of being harmed. Thus, a high-risk condition is one that carries higher odds for psychological maladjustment. Examples of such high-risk situations include exposure to community violence, maternal depression or other parental mental illness, poverty, or notably (referring to this research), war.

Additionally, researchers have examined composites of multiple risk indices. These included education and parents' low income, family histories of mental illness, and neighborhood disorganization. While it is certainly important to consider discrete one-dimensional risk factors, Rutter (1987) established that when multiple risks are present (as they typically are, outside of the lab), effects tend to be cumulative, with the outcomes being far worse than when any risk factor occurs in isolation. However, this being said, it is to be expected that some of the indices included in the cumulative risk are more influential than others. Positive Adaptation, the second module of the resiliency construct, is adaptation that is substantially better than what would be expected given the exposure to risk situations. Further, adaptation must be assessed on a continuum in comparison to the risk exposure.

For example, in a community that carries many risks for antisocial problems, children should be assessed based on the degree to which they are able to maintain socially conforming behaviors (and not from an 'all-or-nothing' perspective). Further, competence must be displayed in a number of environmental spheres. By this, it's meant

that adolescents, for example, might perform well with their peers but demonstrate poor academic performance or conduct disturbances (Luthar, 2006).

### **Overlapping Constructs**

The construct of resiliency is one that can be easily misunderstood and mislabeled. While the correct definition has been weeded out, similar and overlapping constructs must be addressed and discussed. Ego resiliency, a concept for which resiliency is most often confused with, is a trait reflecting general resourcefulness and sturdiness of character, as well as flexibility of functioning in response to changing environmental circumstances (Eisenberg et al., 2004). While both resiliency and ego resiliency both involve strengths and are forms of “integrated performances under stress,” only resiliency presumes conditions of risk, and is a phenomenon rather than a personality trait (although ego resiliency is likely a potential predictor of resilience on stressful conditions) (Cicchetti & Rogosch, 1997).

The construct of hardiness also shares some attributes with resiliency, as well as with ego resiliency. Like resiliency, it presumes risk, and like ego resiliency, it refers to an individual’s enduring trait (Luthar, 2006). However, Kobasa, Maddi, and Kahn (1982) state that hardiness is defined as the presence of three personality dispositions: commitment (being active, having a purpose, feeling connected to those around them), control (feelings of efficacy in one’s own environment), and challenge (perceiving change as positive rather than negative). Consequently, these are enduring qualities that do not rise only in the event of adverse life circumstances.

## **Protective and Risk Factors**

It is important to note that resilience is not uncommon and can stem from the basic human ability to adapt to new situations and stressors. Thus, if such natural adaptive strategies are not impaired, resilience may be vigorous even in times of severe difficulty (Reissman, Klomp, Kent, & Pfefferbaum, 2004). Rutter (2000) contends that resilience is not a fixed attribute but in fact a transactional process between the circumstances defining the risk situation and individual variations. Thus, the primary intention of those who study resiliency is to accurately identify and categorize those factors that facilitate vulnerability to negative life events, protective factors that protect against such circumstances, and the processes that may bring about the associations. Examining vulnerability factors, these are conditions that exacerbate the negative effects of the predisposed risk. For example, as Spencer (1999) found, male gender is a vulnerability marker for individuals living in areas of urban poverty, as boys are typically more reactive than girls to community influences.

As another example, Masten (2001) found that those with low intelligence have a more difficult time adjusting to chronic life adversities over time than those with higher intelligence. Protective factors, on the other hand, are as the name suggests: those who amend the effect of risk in an optimistic and productive direction. As will be discussed at length later, an internal locus of control, having the support of a significant other, or being exposed to adversity in groups, all provide a protective cover for children against the numerous problems associated with traumatic experiences and the onset of PTSD.

## **Biological Influences**

As described by Luthar (2006), modern neuroscience has established that neural plasticity, the phenomenon of structural and functional reorganization of the brain in response to environmental inputs, can engender substantial implications for determining the positive functionality of protective factors when faced with stressors. Moreover, the capacity to regulate or modulate negative emotions in the face of threat is of critical importance for positively adapting. Thus, three distinct biological factors are particularly salient in determining whether individuals become adept or inept in regulating emotions, thus promoting positive adaptation, and by association, resilience.

First, Davidson (2000) writes that the capability to recover quickly from negative responses is critical. Such ability can be gauged by studying the startle reflex, an involuntary response, to an intense and sudden acoustic, tactile, or visual stimulus. A study by Curtis and Cicchetti (2003) found that adverse environmental influences not only affect the startle reflex but, more importantly, the neural network that lies beneath the response.

Secondly, research (Sutton & Davidson, 1997) suggests that the right hemisphere participates to a greater extent in negative affect while the left hemisphere is more involved in positive emotion. Accordingly, individuals who show relatively high activation of the left prefrontal cortex report more positive affect when at rest and in response to positive stimuli, and show less negative emotion in response to negative stimuli. Thus, it is important to consider the asymmetry of brain functioning in considering differing abilities to regulate emotions.

Third, chronic exposure to stressful experiences has been found to lead to excessive activation of the hypothalamic-pituitary-adrenal (HPA) axis. Such disproportionate initiation of the axis can produce damaging (and sometimes pathogenic) effects on neurons and consequently affect the synthesis and reuptake of neurotransmitters, in addition to the sensitivity and density of the receptors (Luthar, 2006). Consequently, resilient individuals are those able to return quickly to baseline levels of neuroendocrine functioning and are able to avoid the damage caused by superfluous HPA activation.

While the three aforementioned features are most salient, as well as researched, it is important to also consider the influence of genetics as another important set of biological processes. Most notable under the work of Caspi and colleagues (2003), recent studies have branded G-E interactions—where both genes and child specific environmental influences contribute to resiliency—as well as specific gene markers that yield either vulnerability or protection.

### **Personal Characteristics**

Regarding personal characteristics, children with higher intelligence, strong emotional regulation, and good coping skills, are thought to be better ‘protected’ from the trauma’s effects (Meier, 2003).

**Intelligence.** Many scholarly articles written on the topic of resilience hastily list high intelligence as a primary protective factor from the effects of trauma. Indeed, the

majority of longitudinal studies of children and adolescents find that intelligence (specifically problem solving and communication skills) and scholastic competence (e.g., reading skills) are positively correlated with the ability to overcome adversity. Moreover, correlations between effective adaptation and higher intelligence tend to increase from early to middle childhood and adolescence (Werner, 2000). Taking this information into account, it would seem that children who are better able to assess stressful life events correctly are also able to determine more effective strategies for dealing with such adversity. However, while many studies on diverse risk groups do show that individuals with high IQs tend to fare better than others, evidence for this notion is not unequivocal and there are certainly somewhat complex stipulations behind such summary statements.

As several scholarly summary articles have reported, studies on diverse risk groups do indeed show that children with higher IQ scores demonstrate stronger resiliency than those with lower scores (Luthar, 2006; Masten, 2001). However, taking environmental influences into account, as Sameroff and colleagues did, it was found that children facing no environmental risk factors consistently scored more than 30 points higher than children with eight or more risk factors (Sameroff, Seifer, Zax, & Barocas, 1987).

Additionally, no preschooler in the zero-risk group tested had an IQ below 85, while more than a quarter (26%) of those preschoolers in the high-risk group did. Thus, the question must be proposed: Does one's environment, and more specifically parental functioning, directly affect one's IQ score, and thereby one's resiliency later in life.

According to Koenen, Moffitt, Caspi, Taylor, and Purcell (2003), five year olds who were

exposed to high amounts of domestic violence had an IQ that was, on average, eight points lower than children who were not exposed to such violence. Moreover, the authors found that even after controlling for genetic effects, internalizing, and externalizing problems, domestic violence still accounted for a significant amount of variation in the IQ scores.

On another front, a number of scholarly works have demonstrated a relationship between maternal depression and low child cognitive functioning in the postpartum period, as well as throughout child's preschool years (Murray, 1992; Sharp et al., 1995). Additionally, and arguably the most compelling testimony on the power of environmental influences on IQ, lies in the work of Rutter and the English and Romanian Adoptees (ERA) Study Team's research on adopted children from Romanian Orphanages. According to Rutter and the ERA team, infants in these orphanages, typically described as having appalling caregiving conditions, were given little to no personalized care, had few toys, and were often washed by being hosed down. After the children were adopted to the United Kingdom, Rutter and the ERA study team found that these children had mean cognitive functioning scores in the mentally retarded range. However, by two years of age, longitudinal evaluations showed catch up effects, with the children losing their early deficits, and by age four, reaching near average developmental milestone levels (Rutter & the English and Romanian Adoptees (ERA) Study Team, 1998).

Taking this research into consideration, one considers the influences of wartime stress on a child's brain development. On a theoretical level, and recognizing an area of potential research, one may feel quite confident arguing that any trauma brought about by

witnessing domestic violence or having a lack of parental care is certainly comparable to that of a warzone. Thus, while the overall statement that those children with higher IQs are more resilient may be correct, it is apparent that many children may not have their neurological capabilities developed to their full potential—and thus are at an predisposed disadvantage.

Other research defies blatantly defies such notions. In a study with three different samples of low-income adolescents, intelligence was not found to be protective. It was in fact suggested that bright adolescents are likely more sensitive than others to negative environmental forces (Gutman, Sameroff, & Cole, 2003; Luthar, 1991; Luthar & Ripple, 1994). Thus, while intelligent adolescents fared far better at school than did their less intelligent peers, this was only the case when stress levels were low. When stress levels became high, the higher intelligence individuals lost much of this advantage and showed competence levels similar to their less intelligent counterparts. Taking these unexpected findings into account, Luthar (2006) suggests that the manifest benefits of innate intelligence may vary depending on aspects of the proximal environment. Overall, more research is required on this particular matter.

**Temperament.** Similarly to the evidence on intelligence, research on temperament has also been shown to garner protection against traumatic stress. As some authors find (Calkins & Fox, 2002; Curtis & Cicchetti, 2003), children low on behavioral activation may react less to stress than others, as displayed by evidence of resting right frontal EEG activation among inhibited children; however, such a pattern is also linked



with tendencies to respond to stressful events with negative affect or depressive symptoms.

**Self-regulation and coping.** Compared with intelligence, the evidence for the protective role of emotional self-regulation is clearer. Several studies have established the positive effects from early childhood onward. Even among adolescents in low-income families, Buckner, Mezzacappa, and Beardslee (2003) found that good self-regulation contributed to resilience, defined as good mental health and emotional wellbeing, even after taking nonverbal intelligence and self esteem into account. Further, perceived self-efficacy to regulate positive and negative affect is related to adolescents' beliefs that they can manage emotional aspects of their lives (in this case, a traumatic event).

Simultaneously serving as a preface for the next section, several researchers describe the critical influence and importance of attachment in determining self-regulation abilities. In a seminal study by Feldman and Klein (2003), it was shown that among young boys in low-income families, secure attachment to mother and positive maternal control at the age of 1½ years predicted the effectiveness of emotional regulation at the age of 3½, with subsequent capacities for self control on the first day of third grade. Further, as emphasized earlier, Bucker and colleagues found that such self-regulation contributed to resilience throughout adolescence.

In experiencing danger and suffering, the major functions of coping are to regulate and modify affection reactions that accompany the stress stressful events (emotion focused coping), or solving the problem and altering the stressful encounter

(problem focused coping) (Lazarus & Folkman, 1984). While research has primarily focused on children's coping skills in terms of age and gender separately, it is important to note that with age, many metacognitive skills develop, which determine the content and variety of coping styles. Furthermore, numerous studies have found that with age, emotion-focused and cognitive coping modes increase, and behavioral coping decreases (Punamaki & Puhakka, 1997). The increase in more "cerebral coping" modes may be due to the fact that older children are able to master ambivalent demands; they can simultaneously be conscious of stress and still focus their attention on other issues. Moreover, older children can modify and change affective responses and cognitive perceptions, whereas younger ones tend to act out their emotions.

**The importance of the environment.** As Luthar (2006) writes, and as the writings above have alluded to, it is increasingly clear that even individual characteristics that help promote resiliency, can be substantially shaped by the environment. Self-efficacy, for example, is strongly influenced by the degree to which adults encourage or hinder the child's attempts at manipulation and control; internal locus of control, a commonly cited protective characteristic, is easily affected by parental maltreatment and teacher inconsistencies in temperament in a child's early years; and self-esteem, a strong protective factor, is just as easily altered by the level of parental warmth. By and large, even individual personality characteristics, and subsequent resilience, are largely affected by a child's early interaction patterns and relationships.

## **The Role of Attachment**

Attachment relationships to others are critical in helping children cope with difficult circumstances. Longitudinal studies of child development have demonstrated that the existence of a supportive relationship with at least one caring adult outside of a troubled home is associated with a better social and emotional outcome later in life (Betancourt & Khan, 2008). Moreover, parents are considered the most important support for children by providing a sense of physical safety, comfort, and nurturing. As discussed by Luthar (2006), particularly important in shaping long term resilient trajectories are early family relationships. Basing their theory on Bowlby's attachment model, some scholars argue that individuals' adaptation is a direct product of both their developmental histories in combination with their current life circumstances. Early experiences place people on probabilistic trajectories of relatively decent or poor adaptation, manipulating the lens through which all future relationships are viewed as well as their ability to successfully employ resources in their environment. Accordingly, if early attachments are insecure, at-risk children tend to anticipate negative reactions from others and can eventually elicit the reactions themselves (furthering feelings of insecurity). Conversely, at-risk children with at least one good relationship are able to take more from nurturing individuals encountered in subsequent relationships.

The benefits of secure attachment in young children have been demonstrated in a multitude of research arenas. Gunnar (2000) concluded that strong, secure attachments to caregivers buffer and/or prevent elevations of stress hormones in situations that typically elicit distress in infants. Further, in a literature review on the development of human's

stress system, Gunnar and Davis (2003) concluded that individual differences in the reactivity and regulation of both the limbic and sympathetic nervous systems are related not only to temperamental characteristics but also quality of care giving. As Luthar (2006) discusses, adequate caregiving even plays an imperative role for older children and adolescents, in promoting positive child outcomes within contextual factors, such as socioeconomic status (SES). Evidence for such importance has been exhibited through the Rochester Child Resilience Project, where two cohorts of low-income urban youth (7–9 years of age, and 9–12 years of age), had parental responsibility examined. It was subsequently found that resiliency was significantly more likely in the dyads of children where parents had relatively good mental health, psychosocial resources, and the ability of emotional responsiveness. Additionally, even when one parent has a mental illness, if the other parent's strong relationship with the child is maintained, the child is 'protected' (Berlin & Davis, 1989).

While research on parenting has traditionally focused on the mother-child relationship, the protective potential of strong parental relationships has also been displayed for fathers or father-like figures in the child's life. As research from several studies of low-income, African American families concludes, fathers who were satisfied with parenting, nurturing, and employed had children with fewer behavioral problems (Black, Dublowitz, & Starr, 1999). Further, close, warm relationships with fathers or father figures (even if they were living outside the home), benefited children by improving their self-esteem, decreasing depression, and lessening behavioral problems (Zimmerman, Salem, & Maton, 1995).

## **Family Relationships, Discipline, and Social Support**

Relationships between parent and child characterized by supportive, warmth, and caring parental attitudes influence their child's wellbeing and can protect children faced with adversity. Thus, a high level of social support, family cohesiveness, and family communication have all been found to protect children from the mediating effects of war. Additionally, if the child does fall victim to a traumatic reaction or PTSD, the family is critical in the child's recovery, and interventions should aim to strengthen social supports for family members (Thabet et al., 2009). Finally, a number of studies have examined the relationship between caregiver mental health and their children's subsequent mental health during war time; the results have shown that if parents are unable to manage war stress poorly themselves (and experience trauma or PTSD), then this is a strong predictor of child's vulnerability (Betancourt & Khan, 2008).

Examining the critical topic of caregiver mental health, Betancourt and Khan (2008) state that caregiver mental health can serve as an important predictor of the child's health as the caregiver often mediates the availability of social support and primary attachment relationships available to the child. A number of studies have also documented the relationship between the mental health of war-affected children and their parents. In a study of Central American children, Locke and colleagues (1996) found that the mother's level of posttraumatic stress symptoms was a strong predictor of PTSD symptoms in their own children. In another study by Dybdahl (2001) targeting Bosnian refugees, a mental health intervention targeting mothers was demonstrated to have direct improvements on the mental health of the mother and indirect effects on the physical and

mental health of their children. Over the six months of intervention, children of participants demonstrated lower reports of emotional and behavioral problems than the control group.

Aside from primary caregiver support and mental health, parental discipline, in the form of monitoring and limit setting, is another broad construct crucial for resilient adaptation. As Cavell (2000) notes, the extent to which parents clearly define limits and consistently enforce rules is essential in determining the child's compliance. Overall, if inappropriate or harsh punishment is used, vulnerability to maladaptive coping patterns and behaviors is exacerbated. For example, Patterson (1983) theorized that when parents resort to harsh and power-assertive techniques, they inadvertently become role models for hostile behavior patterns. Thus, children then will likely escalate their own aversive behaviors, in response to the parents' power assertions, in attempting to control their parents.

Apart from primary caregivers, siblings have also been found to mediate the effects of high-risk circumstances and situation. Evidence from Brody (2004) found that older siblings' competent behaviors at school were linked with increases in younger siblings' competence over time, through the intervening variable of the young siblings' self-regulation. On the contrary, siblings can also worsen vulnerability in at-risk families. As Bullock and Dishion (2002) found, the deviance of siblings was promoted by collusion in the presence of adult caregivers. Further, sibling collusion was found to predict adolescent problem behaviors more so than associations with deviant peer groups.

Extended kin are another source of support to at-risk children, with positive effects occurring directly as well as indirectly via the primary caregivers' adjustment. As Apfel and Seitz (1997) conclude, grandparents often provide substantial emotional and material support directly to their grandchildren. Sources of indirect support occur when grandparents bolster their own children's authoritative parenting behaviors, feelings of wellbeing, and involvement in the children's lives. These effects are, in turn, displayed as positive adaptation in the child.

### **Childcare Institutions and Schools**

While the family system is perhaps the most influential structure in determining a youth's resilience to a traumatic event, the quality and nature of relationships in more removed setting, such as schools and neighborhoods are also implicated in the mental health and adjustment of war-affected youths. Unfortunately, research on this structural system is understudied. However, one study by Wolff and Gebremeskel (1998) compared measures of adjustment among orphans in two institutional care settings. While the institutions were similar in staffing ratios and structures, the researchers observed significantly lower levels of distress among children in the child where close caring relationships between staff and the children in care were encouraged. As Aguilar and Retamal (1998) note, in times of crisis, schools are important in mitigating the effects of trauma. However, as Luthar (2006) points out, while there are numerous programs addressing discipline and structure in the school system, few programs are designed to address the importance of the teacher-student attachment, and the consequential

importance such a relationship holds for positive socializing and resilience. The early provision of educational activities has been argued as an important mean of restoring predictability and social supports to children. Further, the opportunity for children to return to their studies may instill a sense of hope and all them to develop the tools necessary for future success. Educational programs can also serve a protective function in allowing children's mental health to be monitored and assessed as needed, thus allowing for early awareness and subsequent intervention for any behavioral or emotional problems (Betancourt & Khan, 2008).

### **Peers and Social Systems**

While the importance of adult relationships is fairly clear, peer relationships serve an equally important role in strengthening resiliency in at-risk youth. In research examining children of divorce, Hetherington and Elmore (2003) demonstrated that a supportive relationship with a single friend acted as a buffer from the typical emotionally injurious effects. Other research, such as that by Schwartz, Dodge, Pettit, and Bates (2000), has shown that a child's acceptance by peers and friends may soothe the association between family adversities and externalizing behaviors during the elementary years. As Lansford, Criss, Pettit, Dodge, and Bates (2003) conclude, such deductions demonstrate a number of important points: 1) that "remedial" socializing can occur outside of dysfunctional homes, effectively circumventing the destructive lessons learned there; 2) children's learned negative interaction patterns between them and their parents may be modified by the viewing of other peers and parents; and 3) an enhanced



relationship between the children and social institutions acts as an alternative, and likely more positively influential environment. However, just as positive peer relationships can assuage the hardships of family dysfunction, negative or problematic peer relationships may exacerbate vulnerability. Kupersmidt and Dodge (2004) concluded that, overall, children who are rejected by their peers show relatively poor outcomes over multiple domains throughout their life, including delinquency, school dropout, and internalizing problems. One meta-analysis found that social rejection was the most consistent predictor of substance abuse, adult criminality, sexual promiscuity, and suicide (McFayden-Ketchum & Dodge, 1998).

Apart from peers, informal mentoring relationships can serve as another protective buffer against adversity. While not directly relatable to warzone conditions, the Big Brothers Big Sisters of American (BBBSA) movement serves to provide single parent youths, ages 6 to 18, with a one-on-one mentor. An evaluation of the program, by Tierney, Grossman, and Resch (1995), found that compared with their nonparticipating peers, BBBSA youth were 46% less likely to initiate illegal drug use, 52% less likely to skip school, and 27% less likely to initiate alcohol use. Additionally, the same youths maintained higher-quality relationships with their guardians, peers, or parents, and had more positive outlooks on their academic achievements.

Constructive socialization experiences have also been shown to arise from religious affiliations. While studies by Miller and colleagues has shown that religious adolescents are at a relatively lower risk for substance abuse and depression (Miller, Davies, & Greenwald, 2000; Miller & Gur, 2002), it has also been shown that among

rural African American families, relatively high formal religiosity is connected to less conflictual and more cohesive family relationships. These types of correlations may reflect the regular socialization and support processes that occur with regular church attendance, interpersonal interactions, a reliance on effective coping strategies, and feelings of social support, not to mention the query of the meaning of life, or the search for God—all motions that keep one's mind goal directed. The affect of religious affiliation is not completely positive, however. Some authors postulate that childhood depressive symptoms, such as low-self worth, excessive self-blame, and guilt may distort religious messages, thus convincing those with strong religious beliefs that nothing can be done to improve their life, creating formidable barriers for the protective processes of religious affiliation (Coll & Garcia, 1995).

### **Cultural Beliefs, Practices, and Identity**

Cultural beliefs and practices can also play a positive role in promoting resilience when dealing with the hardships of war. Many of these practices build upon strengths inherent in cultural beliefs that are traditionally meant to support and protect children. One such practice in Sierra Leone involves an initiation ceremony for young women that is intended to rid them of *noro*, or spiritual pollution and bad luck, which is thought to plague female survivors of war-related rape. Such ceremonies have been found to aid in the development of greater self-esteem and community acceptance. Another practice, in the Khmer refugee camps in Thailand, is designed to integrate traditional healers and medicines into the western-style care provided. Some research has found that this

traditional support structure is particularly valuable for individuals complaining of insomnia, fatigue, anxiety, and sadness. Taken as a whole, consideration of traditional cultural practices is vital in any trauma related treatment as it may be more culturally syntonetic and engaging for the client than treatment models imported from the west to the war-affected regions (Betancourt & Khan, 2008).

A number of other studies have also provided empirical support of the importance of culture and cultural identity. Yahav and Cohen (2007), for example, compared the responses of Jewish and Arab adults living in Northern Israel during the Second Lebanon War. While both groups were similarly exposed to the missile attacks that took place, the findings displayed that the Arab subjects had reported rates of acute stress disorder and associated symptoms than the Jewish subjects. In interpreting this information, the authors purported several explanations: 1) the resilience of Jews from past exposure in comparison with Arabs, who have not been exposed to as much terrorism and war; 2) the Arab participants' sympathy with Palestinians; and 3) Arab vulnerability to stress resulting from fewer resources and lower socioeconomic status than the Jewish subjects.

As other authors propose, the influence of ethnic identity may also play an influential role in the way acts of war are interpreted and processed. Dubow, Huesman, and Boxer (2009) propose that such reactions may be likely viewed through a lens of past historical and political events. This has been seen through a number of studies of Israelis, by which terrorist events are somewhat commonplace, and consequently, children and adolescents are not traumatized nearly to the levels of comparable incidents in other cultures (Bleich, Gelkopf, & Solomon, 2003; Sharlin, Moin, & Yahav, 2006).

Finally, culture can influence the manifestation of symptoms following war exposure. In a study by Betancourt, Speelman, Onyango, and Bolton (2009), examining the mental health issues of displaced children in Northern Uganda, several culturally distinct distress symptoms were described. While some symptoms were similar to descriptions of anxiety, depression, and conduct disorders (common symptoms in Western cultures), culturally unique behaviors, such as the significance of not greeting others, was exhibited.

Overall, it is unclear whether ideological commitment, cultural identity, or culturally based practices, act as a protective or vulnerability factor, when individuals are put at risk for stress symptoms, when encountering adversity.

## **Chapter 6: Methodology**

Through my dissertation research, I have developed a predictive model of resiliency, in the form of an assessment protocol, for working clinicians to employ when assessing the psychological needs of such children and adolescents. The assessment protocol is composed two parts: a quantifiable self-report for the affected youth, and a semi-structured interview questionnaire for the parents. Utilization of the protocol will not only facilitate the determination of an overall value of potential resiliency but also, in relation to the levels of current symptomatology, traumatic experience, and current and potential protective factors. Treatment planning and implications for practice have also been considered.

The reader should also be aware that the given the lack of financial and logistical means, the test protocol created has not had the opportunity to be tested for validity and reliability at this time; it is purely a model. However, it is the hope of this author that such measures will be able to take place in the near future (through the author's own exertion or a second party).

### **The Creation of the Protocol**

The development of the assessment tool in discussion has come out of the decades of research on both child trauma and associated patterns of resiliency. While the countless definitions and conceptualizations of “resilience” have been discussed, resiliency for the purposes of this product is defined as the relative absence of debilitating

and/or severe psychological distress, in spite of prolonged exposure to traumatic events (such as living through a war or a time of brutal violence).

This contemporary definition, as proposed by Luthar (2006), takes into account two primary constructs, while accounting for historical changes in the understanding of resiliency as well as the exclusionary notions. Such notions included the idea of fluctuations of resilience in a child. As discussed earlier, resiliency is in the context of a developmental process and is never permanent. Moreover, while a child can display resiliency at one point in their life, new circumstances bring out new vulnerabilities. Additionally, while children express resiliency in their overt behaviors, they may still struggle with depression and anxiety (Luthar, 2006). Such a susceptible quality speaks to the pervasive and profound effects a traumatic experience has on a child's life. Lastly, and arguably most significant given the format of the assessment protocol itself, resiliency is developed under the auspices of several factors: internal characteristics of the children, family characteristics, and the larger environment in which the child grows up.

Comprehending the concept of resilience from this multi-dimensional perspective, it is constructive to consider previous rating scales and measures in helping to determine the broad variable categories that influence an individual's resiliency. This brief review will not only appraise an empirical base from which one can examine previous, evidence-based constructs of "resiliency," but allow the researcher to define what areas of resiliency work needs to be further investigated.

Previous resilience scores have been computed by summing up the five scores produced by five scales measuring distress and malfunction: Self-Esteem, Coping Strategies, Social Support, Family Cohesion, and Parental Stress. Then, the distress score was reversed to produce a resiliency score. Thus, resiliency was examined as a continuous variable that is the reverse, or negative, of distress (Luthar & Cushing, 1999).

The first concept measured is *self-esteem*. While self-esteem has not been directly tied to resilience, this author contends that it may likely be a source of inference about the individual's overall motivation and affect. It may also serve as a future predictor of resiliency. A reliable scale is the Rosenberg Self-Esteem scale (Rosenberg, 1965). The scale consists of ten items that ask for perceptions of one's self. (e.g., "On the whole, I am satisfied with myself," and "I feel I do not have much to be proud of.")

*Coping Strategies* can be assessed using the Brief COPE, a brief measure of coping reactions, based on the COPE inventory (Carver, 1997). Participants are asked to indicate what they usually do when they experience a stressful event ranging from 1 ("I haven't been doing this at all") to 4 ("I've been doing this a lot").

*Social Support* can be assessed by the either version of the Social Support Questionnaire (Sarason, Sarason, Shearin, & Pierce, 1987). In the questionnaire, participants are asked to identify personas in their environment that can help in the situation described by the item. For instance, "Who can you really count on to care about you, regardless of what is happening to you?"

*Family Cohesion* can be measured by the Family Adaptability and Cohesion Scale (Olson, Porter, & Lavee, 1985). The 42-item questionnaire asks respondents to rate how

often certain family behavior occurs in their families on a 5-point scale, from “almost never” to “almost always.” Another ten items measure the cohesions scale and ten items measure the adaptability scale: “Family members ask each other for help,” and “family togetherness is very important,” respectively.

*Parental Stress* can be evaluated by asking questions presented in a homogeneous format. For example, “How would you consider your parent’s stress level before and after the event?” and, “Do your mother and father show anger or sadness more than they did before the event?” The questions are answered on a four or six point scale (Demb, 2005).

### **A Semi-structured Format**

Taking into account the review of the current literature, it is important to address the format of the assessment tool created through this dissertation. It is clear that the current indices of resilience use nominal scales; such a decision grants uncomplicated empirical validation and acceptance among the academic community. Nonetheless, there are inherent problems with such a decision. While indeed previous indices do address the major components of resiliency—inherent coping strategies, parental reaction, and external support—they do not speak to the complexity of each component. For example, to address a child’s coping mechanisms, the Brief COPE (Carver, Schreier, & Weintraub, 1989) asks how an individual assesses a stressful experience. While answering the questions on a four point scale (0 to 3) yields scales that describe different methods of coping, it only places an adjective with an individual’s reaction: Active coping, Use of



emotional support, Planning, Acceptance, and Religion. It does not afford the researcher to perceive the experience under which the individual had to cope. This is particularly salient, as such a measure does not discriminate coping between a marital break-up and witnessing the violent death of a family member; it falsely assumes parity. Another advantage to a semi-structured interview is the flexibility an interviewer has during the interview.

Similar to the point just mentioned, a semi-structured interview format affords the interview to veer off the pre-set questions and explore or focus their attention on a specific experience or topic that may be importance to assessing the child's traumatic experience. For example, in certain African cultures, religious or tribal rituals may play a significant role in facilitating resiliency. However, depending on the child's age and comprehension of such events, the rituals may not have as significant an impact, or may hold different meaning to each individual child—just as individual differences in religious affiliation anywhere else in the world. As an example, an eight-year old Caucasian male may identify as Catholic but not fully grasp the concepts or rituals that may have “resilient value”; a preset questionnaire would not be attuned to these types of discrepancies.

Finally, a semi-structured interview allows the interviewer to tailor questions to the population that is being interviewed. This is particularly relevant when interviewing younger children who do not have the language comprehension of their older counterparts. Thus, the interviewer can alter the language of the question to meet the intellectual capacity of the child. As the clinician ultimately uses his clinical judgment in

determining the extent of resilience, internal validity is not threatened by altering the superfluous language of the questions.

### **A Quantitative Scale**

While a definitive choice has been made to utilize a semi-structured format for both questionnaire forms, a quantifiable method for predicting resiliency is arguably the most crucial component of the assessment tool. In examining previous measurement schemes in the empirical study of resiliency, a quantitative approach that seems appropriate involves a “simultaneous constellation of multiple risks” (Luthar & Cushing, p. 137). This increasingly used measure in resiliency research reflects an understanding of the co-occurrence of serious and multiple adversities in the world, most pertinently, wartime. As originally researched by Sameroff and colleagues (Sameroff & Seifer, 1990; Sameroff, Seifer, Barocas, Zax, & Greenspan, 1987), when multiple aspects of risk are being considered collectively, measures of “overall” risk have been derived via simple additive, or summative strategies. As Sameroff and Seifer (1990) proposed, a series of indices previously established to be of high risk in nature were selected (in their case, children of schizophrenic mothers). Then, using a count of one versus zero, the risk factors faced by a particular child were added to compute the overall risk encountered (Luthar & Cushing, 1999).

A similar methodology was adopted with continuous data by Masten, Morison, Pelegrini, and Tellegen (1990). In their case, however, scores on different risk scales were standardized and the  $z$  scores were added to indicate the total risk faced. As

discussed by Luthar and Cushing (1999), additive approaches to assessing risk are likely to be much more reliable than measurements involving individual risk factors since, by and large, increasing the number of items on a scale increases its reliability. Additionally, scales involving summated risk have high face validity, given the already stated co-occurrence of multiple psychosocial stressors in wartime. Finally, empirical support for the validity of additive measures is seen in research evidence that the simultaneous consideration of multiple stressors accounts for significantly more variance in outcomes than any one stressor considered on an individual level.

On the other side of the coin, summative approaches have two key criticisms. First, it may be argued that in summative methods items added have high overlap. Luthar and Cushing (1999) state, however, that such problems are inherent in most psychological scales. In fact, on questionnaires measuring pathological symptoms or personality variables where multiple items on a scale are added, items must have shared variance in the interest of internal consistency. A second criticism, this time from a conceptual perspective, concerns the fact that summated risk scores convey nothing about the specific processes through which the additive factors in question affect consequential adjustment. This brings up the relevant issue of proximal versus distal mediators of risk. Thus, while one is able to comprehend an overall sense of how resilient a child may be given numerous variables, there is certainly heterogeneity of items in terms of the potential impact. However, for the purposes of this analysis, proximal and distal mediators of risk were not differentiated. Additionally, equivalent status was assigned to

both risk and protective factors. This decision was made primarily as the result of the conceptual difficulty in operationalizing a difference between risk and protective factors.

As Sameroff and Seifer (1990) pointed out when examining children of schizophrenic mothers, if one assumes a disease model of illness for schizophrenia, then one can identify specific risk factors and by consequence, the protective factors. However, if one is unclear about the specific etiology of schizophrenia, then the primary definition of risk is much more difficult. Similarly, in predicting reactions to trauma and associated resiliency, the research states that a child is more likely to develop PTSD if they experience A, B, and C. However, the lack of A and B does not necessarily implicate PTSD. Additionally, if D, E, and F are all known as resilient traits, it is currently unknown how many traits are required for resilience to transpire. Finally, based on the research conducted for this dissertation, it is currently unknown how exactly risk factors and resilient traits interact.

### **Suggested Method of Evaluation for Child Self-report**

In following an additive strategy of quantitative evaluation, a potential scoring system for the children's resiliency questionnaire can be created, taking into account levels of the child's current symptomatology, traumatic experience, and current and potential protective factors.

I propose a discrete additive scale out of 20. The number is based upon specific groupings of two questions that are directed toward ascertaining related information.

After the clinician administers the semi-structured interview of 24 questions to the child,

they will subsequently give a score of 0 or 1 to twenty questions groupings; there are four sets of questions that require only one score each (questions 1–2, 7–8, and 12–13, and 21–22).

As observed in the *Semi-Structured Interview for Child*, questions one through eight examine the specifics of the traumatic event(s) that the child experienced, any posttraumatic stress reactions, and the support/reaction of individuals who surrounded the child in the course of the event. Questions 9–24, in coordination with the literature of factors that contribute to resiliency, then examine the child’s personal characteristics, family and friend support, and external supports—all of which may be predictive of resiliency.

To accurately quantify and establish a number by which resiliency may be predicted, the Child Self Report must be divided into two parts. As already mentioned, these are: a) *Risk Factors*, composed of questions one through eight and including six of the twenty groupings; and b) *Resilient Factors*, questions nine through 24, and including the remaining 14 groupings.

In assessing the part one, *Risk Factors*, the clinician will mark 0 if the clinician determines (based upon the literature, and his/her own clinical judgment) that the child has been adequately exposed, and is thus at risk for developing a traumatic response, such as PTSD. Conversely, if based on the child’s responses, the clinician decides that the chances are less than great that child will develop a traumatic reaction, the clinician will mark a 1 for that group. For example, if in question three (“How long did these events go on for?”), the traumatic event lasted several months (e.g., child’s home city was the site

of frequent bombings); the clinician could then mark that group as 0, as based on the research, the chances are greater than not that the child will subsequently develop a traumatic reaction. Note that in the *Risk Factors* section, two marks/groupings are composed of two questions: questions one and two constitute one group, and questions seven and eight constitute a second group.

The scoring of part two, *Resilient Factors*, is similar to part one, with the exception of an inverse scoring system. In this case, if the clinician judges that, based upon the child's answer, the child possesses a resilient trait or has supports (e.g., social, familial, institutions) that are conducive to the development of resiliency, then the clinician will mark that grouping with a 1. Conversely, if the clinician judges that the child does not possess a trait (e.g., age-appropriate problem solving skills), then they will mark that group with a 0.

Once all groupings have been marked 0 or 1 and have been tallied out of 20, the number is compared with a scale devised by this author. As seen in Appendix C, the scale is divided into four quadrants, with a minimum score of 0 and a maximum score of 20. Quadrant one, inclusive of scores 0–5, suggests that the child is extremely unlikely to exhibit resiliency; quadrant two, inclusive of scores 6–10 suggests that the child is fairly unlikely to exhibit resiliency; quadrant three, inclusive of scores 11–15 suggests that the child is fairly likely to exhibit resiliency; and quadrant four, inclusive of scores 16–20, suggests that the child is extremely likely to exhibit resiliency.

## **Suggested Method of Evaluation for Parent/Guardian Questionnaire**

Similar to the child self-report, the Parent/Guardian Questionnaire is composed of semi-structured interview questions. However, there are significantly fewer questions (17), and several components of the child's potential resiliency are not investigated. The shortened questionnaire is primarily due to the fact that a parent/guardian would be unlikely to appropriately elucidate their child's attachment style, feelings of self-efficacy, or self-esteem level. Even in the case that a parent felt able to accomplish such as a task, the validity of statements concerning their child's internal belief systems would be highly scrutinized and likely, ultimately discarded. The parent/guardian questionnaire is also considered to be a qualitative supplement to complement the quantitatively based child self-report. It is thus primarily used to: 1) provide additional validation to the answers the child has given on the self-report; 2) provide additional information about the traumatic circumstances and potential resilient characteristics that may have been missed in the child self-report; and 3) provide a brief summary to the clinician of any changes in the parent's mental health status. With this understanding in mind, the parent/guardian questionnaire is not, at this time, created to be quantifiable. However, conclusions of potential resiliency may still be made based upon clinical judgment; additionally, if the clinician feels necessary, the quantitative scoring model from Child Self Report may be utilized. In this case, a gradation scheme of low, medium, and high resiliency potential can be employed (see Appendix C).

## **Chapter 7: Discussion**

The effects of traumatic stress on a child or adolescent are devastating and negatively impact numerous facets of their psychological and social development.

The current research has explored the multiple factors that allow children to evade the serious psychological consequences of growing up in a war zone or war torn environment. The development of a predictive model will not only allow clinicians to link specific situational and environmental variables to potential resiliency levels, but be valued for treatment suggestions and methods of immediate interventions. Cross-cultural application of treatment and limits of this dissertation must also be addressed.

### **Immediate Interventions and Types of Treatment**

As has been made thoroughly clear, the multitude of war-related stressors can overwhelm all aspects of a child's life: personal, social, and institutional. Thus, any psychological restoration that is going to take place must first occur under the pretext of a physically safe environment. As Yahav (2011) writes, elimination of stressors for children characteristically involves one of two possibilities. First, the cessation of the existing conflict and establishment of a safe environment, or second, relocating the child to a safer area, either within their country of origin or to a foreign one. Barenbaum et al. (2004) make the point that as younger children often react to separation from parents and familiar home surroundings with separation anxiety and other internalizing and externalizing symptoms, older children (12 or older) typically perceive displacement more favorably. After a physically safe environment has been created, the satiation of a



child's basic needs, including food, adequate shelter, clothes, and sanitation must be met. Third, the child must regain some reconnection to their culture, tradition, natural environment, or spiritual practice that was of meaning and value before the traumatic event (or war) began. Only once these steps have occurred can the child begin to regenerate their sense of trust and basic safety, and consequently be amenable to psychological interventions.

Overall, psychological treatments for children of trauma and war are aimed at enhancing effective coping skills, providing social support, and promoting resiliency (assuming that the child has resilient traits in some arena); although in all cases, interventions should be tailored to the particular circumstances and to the individual weaknesses and strengths of the child in mind. Many intervention programs, however, do emphasize psycho-education regarding the child's knowledge about normative responses to trauma, thus legitimizing and normalizing any fear the child may have concerning their recent beliefs, fears, or behaviors (Brown & Bobrow, 2004; Punamaki, 2002). Additionally, a primary goal of many post-war therapies is to aid children in mastering their distress through regaining a sense of control over their feelings and thus the situation (Barenbaum et al., 2004).

While there is no current gold standard for treating children of war, evidence-based interventions that have been found to reduce children's stress symptoms include brief trauma/grief-focused psychotherapy, narrative exposure therapy, meditation-relaxation techniques, eye-movement desensitization and reprocessing (EMDR), and the widely publicized trauma-focused cognitive behavioral therapy (TF-CBT). Other

interventions include play therapy, expressive arts therapy (including music and drama) and spiritual prayer.

While TF-CBT and other cognitive behavioral treatment methods have composed much of the empirical literature surrounding trauma treatments (primarily due to its defined protocol and expedient evaluation methodology), an examination by Bryant (2000) determined that methods defined as being cognitive-behavioral actually combine many dynamic and narrative methods in treatment. For example, when the use of “fantastic reality” is utilized during a CBT treatment, a Winnicottian approach is adopted. Moreover, a narrative approach to restructure a child’s personal story is often placed alongside cognitive methods of treatment. Certainly pertinent to this dissertation, all the above information begs the question, what type of treatment should be utilized in which circumstances, and administered to what population?

### **Treating Young Children**

While many trauma therapists like to begin with a Cognitive Behavioral framework, trauma work with young children often requires the use of expressive and dynamic approaches as many have difficulty relating directly to their anxiety and fears. Therapy through play, drama, music, and drawing are particularly efficient as physiologically, traumatic memories are stored in the right hemisphere of the brain. Consequently, children may be unable to verbally express the terror they have directly faced or witnessed. In contrast, the brain’s right hemisphere is responsive to creativity and play, signifying that such methods are efficacious for facilitating the processing of

traumatic events (Crenshaw & Hardy, 2007). Particularly with young children, play can act as metaphor, symbolism, and enactment, which the child can then use to express what they cannot verbally communicate (Haen, 2005). McNamnee and Mercurio (2006) also emphasize the use of children's books in fostering a sense of safety and security in young children. Not only do books describe relevant events and legitimize feelings of fear to children who have experienced a traumatic event, they can help children empathize with others experiencing similar events, aid them in expressing their own fears, and enhance feelings that they're not alone. Drawing and painting also has a long and well-documented history in aiding children to recall both traumatic events and associated emotions. Such acts seemingly create an alternative transitional space by which feelings can be externalized into a concrete form and be recreated (Hanney & Kozlowska, 2002). Giving further cadence to this concept of recreation, drawings are being increasingly utilized as means to communicate with children during the interview process (Driessnack, 2005). It is important to note that while expressive arts therapies have strong support, some research (Machell, 2001) purports that some expressive methods, such as drawing in trauma therapy, are insufficient to address trauma recovery, and may even lead to re-experiencing of the trauma.

In relation to the assessment protocol proposed, it is recommended that if a child has a resiliency score in the 16–20 range (*Extremely Likely*), expressive arts therapies be readily utilized as a primary method of processing the trauma. However, in making conservative estimates, if it is determined that a child falls within the 0–15 range (Extremely unlikely, Fairly unlikely, or Fairly likely to exhibit resilience) that expressive

arts therapies be used as part of a more complex and extensive therapy treatment. The introduction of cognitive methods, such as TF-CBT, plays a key role here.

### **Treating Older Children and Adolescents**

The strengths of many cognitive treatments for war-affected children lies in the fact that the approach directly attacks several of the symptoms that plague children's thoughts after a traumatic experience. Its emphasis on addressing fear and feelings of helplessness and anxiety aids the child in mastering their negative emotions, thoughts, and actions with subsequent analysis and adjustment of their thoughts and behaviors (Murray, Cohen, Ellis, & Mannarino, 2008). Additionally, trauma-focused CBT has been found to be more efficient than other methods in treating victims of anxiety and shock disorders (Kendall, 1994).

This knowledge is particularly useful when considering any reported symptoms of an acute stress disorder or posttraumatic stress disorder reported on the Child Self-Report by older children or adolescents. For individuals who are able to verbally express their fears and anxieties, CBT exposure techniques can as well be particularly effective in decreasing the avoidance and hyperarousal symptoms of PTSD. Moreover, exposure can assist the child or adolescent in processing their trauma through the retelling of the traumatic memories (Catani et al., 2009).

Other individual treatment models that may have been found to alleviate distress in older children and adolescents include Trauma Systems Therapy (TST)—which helps children build their emotional regulation skills while targeting and reducing the

environmental stressors that contribute to the emotional dysregulation—and psychopharmacological treatments. As Cohen, Perel, Debellis, Friedman, and Putnam (2002) report, while there are no controlled medication trials on children affected by war, there is evidence that psychopharmacological treatments that supplement therapeutic interventions do produce greater symptom relief than therapy alone. This specific information also comes with the caveat that psychologists fully understand the psychobiology of PTSD, as well of the risks and benefits of medication for children with reported PTSD symptoms.

### **Family Treatment Approaches**

As so emphasized throughout the literature, as well as in the proposed assessment measure, the coping styles, emotional availability, and mental health of a child's parents after a traumatic event plays an ever-significant role in promoting that child's resiliency. Thereby, family treatment approaches are increasingly believed to be significant for children who experience war trauma. Relating this information to the proposed protocol, family treatment would seemingly be fundamental for children who report a lack of positive support from their parents, or conversely, a negative parental reaction. Additionally, any self-reported negative family reactions or lack of support from siblings may also implicate family treatment over an individual based approach.

The strength of family based interventions rests on the premise that the goals parallel the resilient traits of a child that are induced by family members. These interventions aim to not only improve each family member's wellbeing and adaptation,

they also afford the parents and children to share their differing perspectives on the war, possible flight (if they are refugees), and new acculturation experience. Additionally, family treatment methods help identify family patterns of coping and communication, enhance empathy between family members, restore a sense of parental executive functioning, and allocate opportunities for meaning making through shared expressive exercises (Porterfield & Akinsulure-Smith, 2007).

### **School and Community-based Approaches**

As identified in the resiliency literature, schools and community supports can provide a drastic contrast to the disruption a child feels in their home during and after a traumatic event. These potentially stable, safe, and supportive environments have not only been found to promote resiliency but can provide a space to address children's mental health problems before they develop or worsen (Betancourt, 2005). While there is, unfortunately, little research on school or community organized group interventions to facilitate the adjustment of war-affected children, Yalom (1995) has extensively discussed the benefits and goals of group therapy. These include the normalization of experiences and reactions, fostering hope, strengthening interpersonal relations, and creating opportunities for individuals to redevelop a sense of connection and belonging—a connection that is often severed or severely strained by war or trauma.

For the above reasons, it is highly recommended that even if not indicated on the child-self report, war-affected children have the opportunity to discuss their experience through such school or community organized therapeutic process groups.

## **Cultural Awareness and Shifts in Approach**

Taking into account the immense amount of empirical research dedicated to individual treatments for post-traumatic stress disorder, it is poignant to note that in recent years, several child rights organizations including UNICEF, Save the Children, and the International Rescue Committee, recommend that the most efficacious method to promote the psychosocial wellbeing of war-affected children is to support their families and communities, specifically pointing to the critical roles of schools in providing the required predictability and structure (UNHCR, 2004; Save the Children, 1996; IRC, 2003).

These reports propose numerous arguments in support of a “developmental” rather than a “curative” intervention. First, there is increasing support for the belief that only a small portion of individuals in war-affected communities exhibit serious psychological difficulties requiring individual care. Therefore, the majority of war-affected children should attend school and community based programs that focus on developing stress coping skills and resiliency (Loughry & Eyber, 2003). While it is a hard fact to face, Stichick Betancourt contends that post-conflict, there are such a vast amount of children who are exposed to loss and violence, individually oriented approaches cannot effectively address the mental health needs of all of them in an appropriate amount of time (Stichick Betancourt, 2004a).

A second concern is that individual treatments for PTSD are based upon western style pathology concepts, and thus are not necessarily experienced cross-culturally; rather the ways in which children suffer from trauma is subject to many contextual factors.

Several authors have argued that western-style therapeutic modalities are not appropriate for people suffering from mental disorders in other part of the world, as the focus on the individual is not endorsed in non-western societies. More so, western talk therapies have failed in the past in unstable and impoverished settings where cultural context prevails, as these therapies locate the burden and cause of responsibility within the individual.

Ironically, some authors argue that the child's confrontation of traumatic events, which is often encouraged in individual therapy, may negatively affect their culturally specific coping mechanisms (Kalksma-Van Lith, 2007).

Third, it is becoming increasingly accepted that a child's mental health, and any subsequent psychosocial interventions relies primarily on secure family relationships, a predictable environment, social support, and cultural ties (Stichick Betancourt, 2004b).

As it applies to the proposed assessment protocol, the cultural differences and caveats to individual treatment discussed do not seem to discredit or diminish the professed value of the protocol. In fact, such knowledge emboldens the usefulness of the measure, as it at this time not culturally specific. The protocol also does not advocate any particular individual treatment, and in fact sheds light on the most recent shifts on post-traumatic work with children—proactive stress resilience training in schools and the community.

### **Limits and Implications**

Although the results of this dissertation will provide clinicians and, by extension, humanitarian organizations with valuable information, there is a key limitation to this



study. Given that this is a dissertation without financial funding, it would be extremely difficult (both ethically and logistically) to survey the children and adolescents in question. Thus, consideration of this protocol should include the knowledge that at this time, it is not empirically validated. As discussed above however, it is the hope of this researcher that with the completion of this dissertation, further field research with the instrument will take place, allowing the protocol to be tested and empirically validated.

Another limitation regards the cross-cultural component that was just discussed. While the protocol is not currently culturally specific, any further developments may include a certain cultural aspect. Consequently, one must be aware of the current research (as discussed earlier) as well as retain the help of psychologists or other mental health professionals from that area of the world; such extra attentiveness to cultural variables will surely go a long way in the applied effectiveness of the protocol.

Results from this dissertation have important clinical implications. First, by further understanding the mediating factors that contribute to the development of resiliency in children who grow up amid traumatic violence and war, clinicians, and humanitarian organizations will be better able to focus their psychological rehabilitation services as well as provide education for families and primary aid organizations during a conflict, with the hopes of mitigating any potential damage. Secondly, the importance of school and community based proactive stress-coping interventions for children and adolescents have been highlighted. While there is certainly a percentage of war-affected children who will require individually based treatment, such western-style treatments come with innate difficulties that have yet to be resolved. On the other hand, school and

community based interventions are both efficacious and efficient in building and supporting the same resilient traits that have been thoroughly accentuated throughout this dissertation.

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## Appendix A: Semi-Structured Interview for Child

### Factors Affecting Resiliency In Childhood

Today's Date: \_\_\_\_\_

Full Name: \_\_\_\_\_

Sex: \_\_\_\_\_ Ethnicity: \_\_\_\_\_ Age: \_\_\_\_\_

1. Have anything ever happened to you that made you scared or sad? Have you ever seen anything scary or sad?
2. What did you see?
3. How long did these events go on for?
4. While it was happening, do you remember how it felt?
5. (If traumatic experience has ended) Do you ever think about what happened? (If so) A lot or a little? What kind of things do you remember?
6. Since the scary time, do you eat more or less? Do you sleep more or less? (Recommended that specifics of current sleeping and eating habits are examined)
7. During the event(s), were you usually by yourself or with family or friends?
8. How did they react? Did you discuss the event(s) with them at all?
9. Do you consider yourself a good student? How do you do at school?
10. Before the event, were you a good problem solver? Did you have to solve some problems during the event(s)? What was the result?
11. Before the event, had anything made you very upset? Tell me about it. What did you do to make yourself feel better?
12. Tell me about your parent(s)/person(s) who take care of you? What are they like? How long have you been with them?
13. Do you feel close with them? What do they do that makes you happy? Are they safe to be around? How do you they make you feel when you're with them?

14. Do you have siblings? Tell me about them. What are they like? Do you feel close/safe with them?
15. When you were with the individuals (asked about above) during/after the event(s), how did they react/handle it? [looking for symptoms of traumatic reaction/PTSD symptoms]
16. Did you go to school during/after the event? Tell me about that. What were the teachers like? Did it feel like normal, or could you tell that the teachers were upset? Explain.
17. During/after the event(s), did you do any rituals/ceremonies with your family/friends/school to talk about or address the event(s)? How did that make you feel? Tell me about it.
18. Before the event, did you feel like you could accomplish tasks/goals you had previously set?
19. Will you name some of your friends? What kind of things do you like to do with them? How often do you see them?
20. When you ask your friends to describe you, what do you think they would say?
21. If you're mother/father/guardian was to describe you, what would they say?
22. Who is the most important person in your life? Tell me about them? How do you feel when you're around them? Were they there during the event(s)?
23. When you get in trouble, what do your parents say? Do you get punished? How?
24. Do you consider yourself religious? What would your religious values say about the event(s)?



## Appendix B: Semi-Structured Interview for Parent/Guardian

### Factors Affecting Resiliency In Childhood

Today's Date: \_\_\_\_\_

Full Name: \_\_\_\_\_

Sex: \_\_\_\_\_ Ethnicity: \_\_\_\_\_ Age: \_\_\_\_\_

1. What traumatic event(s) has your child (or currently) witnessed or experienced?
2. What specifically did he witness?
3. How long did the event(s) events last for?
4. How did your child express to you his feelings about what was happening?
5. (If traumatic event has ended) Does your child discuss the event(s) with you? If so, what does he say? If not, does he discuss it with other individuals?
6. Did you notice any changes in their behaviors, sleeping and/or eating patterns during/after the event(s)? If so, what were they?
7. During the event(s), was your child by themselves, or with friends and family? Explain.
8. How did those around your child react during/after the event(s)? What kind of behaviors did they display?
9. Is your child a good student? How do they do at school? Any academic difficulties?
10. Before the event, was your child a strong problem solver? Did they have to solve some problems during the event(s)? What was the result?
11. Before the event, had your child ever become very upset? Please explain. What did they do to make themselves feel better?
12. Does your child have siblings? Tell me about them. What are they like? Does your child feel close/safe with them?
13. When your child was with individuals (asked about above) during/after the event(s), how did those individuals react/handle it?

14. Did your child go to school during/after the event? Tell me about that. How did his teachers react? Did they soothe your child and make everything feel normal, or could you tell that the teachers were upset? Explain.
15. During/after the event(s), did you or your child participate in any rituals/ceremonies with your friends/family/school to talk about or address the event(s)? If so, do you know how it impacted your child? Tell me about it.
16. What has this experience been like for you personally? Have you noticed any changes in your mood, behaviors, and sleeping or eating patterns?
17. If the child's other parent has been present, what has the experience been like for them? Have you noticed any mood, behavior, or sleeping/eating changes?

## Appendix C: Predictive Resilience Profile Summary

### Factors Affecting Resiliency In Childhood

Today's Date: \_\_\_\_\_

Full Name: \_\_\_\_\_

Sex: \_\_\_\_\_ Ethnicity: \_\_\_\_\_ Age: \_\_\_\_\_

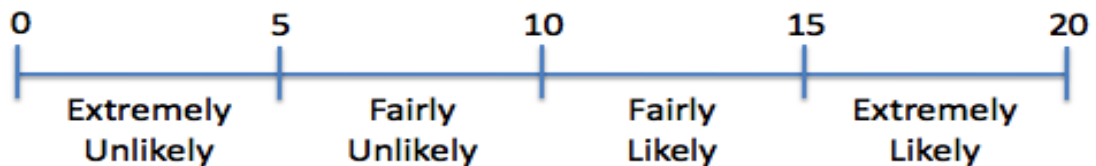
### Child Self Report: Groupings

Please Mark 0 or 1 based upon the current research and your clinical judgment

- |                                       |   |   |                                      |
|---------------------------------------|---|---|--------------------------------------|
| <input type="checkbox"/> Question 1-2 | <input type="checkbox"/> Question 9     | <input type="checkbox"/> Question 16    | <input type="checkbox"/> Question 23 |
| <input type="checkbox"/> Question 3   | <input type="checkbox"/> Question 10    | <input type="checkbox"/> Question 17    | <input type="checkbox"/> Question 24 |
| <input type="checkbox"/> Question 4   | <input type="checkbox"/> Question 11    | <input type="checkbox"/> Question 18    |                                      |
| <input type="checkbox"/> Question 5   | <input type="checkbox"/> Question 12-13 | <input type="checkbox"/> Question 19    |                                      |
| <input type="checkbox"/> Question 6   | <input type="checkbox"/> Question 14    | <input type="checkbox"/> Question 20    |                                      |
| <input type="checkbox"/> Question 7-8 | <input type="checkbox"/> Question 15    | <input type="checkbox"/> Question 21-22 |                                      |

Total Resiliency Score: \_\_\_\_ / 20

### Potential Resiliency



Adult Questionnaire: Please record any distinctions between the information offered on the Child Self-Report and the Adult Questionnaire. Please also offer your overall impression of potential child's resiliency level.

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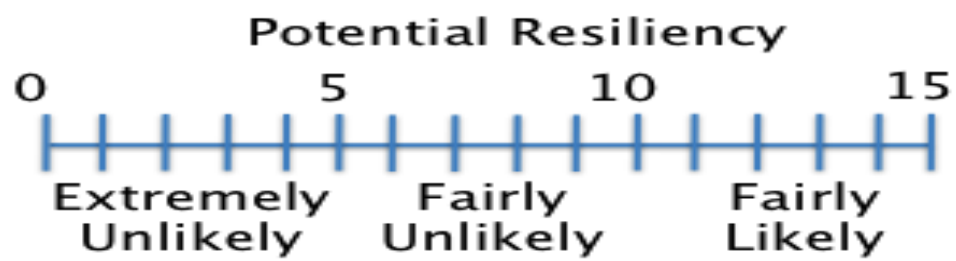
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## Appendix D: Previously Utilized Measurements of Resiliency

### Factors Affecting Resiliency In Childhood

#### 1) Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten-item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1. On the whole, I am satisfied with myself.
- 2.\* At times, I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
- 5.\* I feel I do not have much to be proud of.
- 6.\* I certainly feel useless at times.
7. I feel that I'm a person of worth, at least on an equal plane with others.
- 8.\* I wish I could have more respect for myself.
- 9.\* All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self-esteem.

The scale may be used without explicit permission. The author's family, however, would like to be kept informed of its use:

The Morris Rosenberg Foundation  
c/o Department of Sociology University of Maryland  
2112 Art/Soc Building  
College Park, MD 20742-1315

## 2) Brief COPE (Carver, 1997)

These items deal with ways you've been coping with the challenges of raising a child with an autism spectrum disorder. There are many ways to try to deal with life's challenges. These items ask what you've been doing to cope with this challenge. Obviously, different people deal with things in different ways, but I'm interested in how you've tried to deal with it. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real."
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.

### 3) Social Support Questionnaire (Sarason et al., 1987)

#### INSTRUCTIONS:

The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give the person's initials and their relationship to you (see example). Do not list more than one person next to each of the letters beneath the question.

For the second part, circle how satisfied you are with the overall support you have.

If you have no support for a question, check the words "no one," but still rate your level of satisfaction. Do not list more than nine persons per question.

Please answer all questions as best you can. All your responses will be kept confidential.

#### EXAMPLE:

Who do you know whom you can trust with information that could get you in trouble?

- \_\_\_ No one  
A) R.N. (brother) D)  
C) R.S. (friend)  
B) L.M. (friend) E) F) T.N. (father)  
G) L.M. (employer) H)

How satisfied?

6) Very Satisfied : 5) Fairly Satisfied : 4) A little satisfied : 3) A little dissatisfied : 2) Fairly Dissatisfied : 1) Very Dissatisfied

- 1) Whom can you really count on to listen to you when you need to talk?
- 2) How satisfied?
- 3) Whom could you really count on to help you if a person whom you thought was a good friend insulted you and told you that he/she didn't want to see you again?
- 4) How satisfied?
- 5) Whose lives do you feel that you are an important part of?
- 6) How satisfied?
- 7) Whom do you feel would help you if you were married and had just separated from your spouse?
- 8) How satisfied?
- 9) Whom could you really count on to help you out in a crisis situation, even though they would have to go out of their way to do so?
- 10) How satisfied?
- 11) Whom can you talk with frankly, without having to watch what you say?
- 12) How satisfied?
- 13) Who helps you feel that you truly have something positive to contribute to others?
- 14) How satisfied?
- 15) Whom can you really count on to distract you from your worries when you feel under stress?

- 16) How satisfied?
- 17) Who can you really count on to be dependable when you need help?
- 18) How satisfied?
- 19) Whom could you really count on to help you out if you had just been fired from your job or expelled from school?
- 20) How satisfied?
- 21) With whom can you totally be yourself?
- 22) How satisfied?
- 23) Whom do you feel really appreciates you as a person?
- 24) How satisfied?
- 25) Whom can you really count on to give you useful suggestions that help you to avoid making mistakes?
- 26) How satisfied?
- 27) Whom can you count on to listen openly and uncritically to your innermost feelings?
- 28) How satisfied?
- 29) Who will comfort you when you need it by holding you in their arms?
- 30) How satisfied?
- 31) Whom do you feel would help if a good friend of yours had been in a car accident and was hospitalized in serious condition?
- 32) How satisfied?
- 33) Whom can you really count on to help you feel more relaxed when you are under pressure or tense?
- 34) How satisfied?
- 35) Whom do you feel would help if a family member very close to you died?
- 36) How satisfied?
- 37) Who accepts you totally, including both your worst and your best points?
- 38) How satisfied?
- 39) Whom can you really count on to care about you, regardless of what is happening to you?
- 40) How satisfied?
- 41) Whom can you really count on to listen to you when you are very angry at someone else?
- 42) How satisfied?
- 43) Whom can you really count on to tell you, in a thoughtful manner, when you need to improve in some way?
- 44) How satisfied?
- 45) Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?
- 46) How satisfied?
- 47) Whom do you feel truly loves you deeply?
- 48) How satisfied?
- 49) Whom can you count on to console you when you are very upset?
- 50) How satisfied?
- 51) Whom can you really count on to support you in major decisions you make?
- 52) How satisfied?
- 53) Whom can you really count on to help you feel better when you are very irritable, ready to get angry at almost anything?
- 54) How satisfied?



#### 4) Family Adaptability and Cohesion Scale IV (FACES IV) (Olson, Porter, & Lavee, 1985)

*\*Please note that the items below are a sample of the 62 items in the most current FACES IV package, as the full package requires purchase\**

Directions to Family Members:

*1. All family members over the age 12 can complete FACES IV. 2. Family members should complete the instrument independently, not consulting or discussing their responses until they have been completed.*

FACES IV: Sample Items

1. Family members are involved in each other's lives.
5. There are strict consequences for breaking the rules in our family.
10. Family members feel pressured to spend most free time together.
15. Family members feel closer to people outside the family than to other family members.
20. In solving problems, the children's suggestions are followed.
25. Family members like to spend some of their free time with each other.
30. There is no leadership in this family.
35. It is important to follow the rules in our family.
40. Family members feel guilty if they want to spend time away from the family.

Family Communication: Sample Items

44. Family members are very good listeners.
46. Family members are able to ask each other for what they want.
50. Family members try to understand each other's feelings.

Family Satisfaction: Sample Items

54. Your family's ability to cope with stress.
58. Your family's ability to resolve conflict.
62. Family members concern for each other.