Journal of Loss and Trauma, 10:347–358, 2005

ISSN: 1532-5024 print/1532-5032 online
DOI: 10.1080/15325020590956774

Routledge
Taylor & Francis Group

CHALLENGES ASSOCIATED WITH THE STUDY OF RESILIENCE TO TRAUMA IN HOLOCAUST SURVIVORS

LIAT AYALON

Langley Porter Psychiatric Hospital, University of California, San Francisco, California, USA

To date, the majority of research on the Holocaust has focused on the pathological sequelae associated with exposure to severe trauma. While this line of research is extremely important in understanding trauma-related psychopathology, it ignores the experience of those who managed to resume adaptive life despite the horrendous effects of the Holocaust. This article reviews the current state of knowledge on resilience to trauma in light of the numerous challenges associated with launching this type of research with survivors of the Holocaust. A more balanced approach that identifies the pathological as well as the resilient aspects in the life of Holocaust survivors is likely to provide important clinical and theoretical information about survival following exposure to severe trauma.

The pathological sequelae of the Holocaust are well documented. Approximately 46.8% of Holocaust survivors show signs of posttraumatic stress disorder several decades after the Holocaust (Kuch & Cox, 1992). In addition, Holocaust survivors report higher levels of depression, anxiety, and physiological symptoms than the general population (Kuch & Cox, 1992; Kahana, Harel, & Kahana, 1989). Furthermore, ample research has shown that the negative effects of the Holocaust continue far beyond the survivors' generation and affect the second and third generations of Holocaust survivors as well (Rubenstein, Cutter, & Templer, 1989–1990).

Psychological and psychiatric research on the Holocaust has focused primarily on the pathological aspects associated with severe exposure to trauma. The clinical terminology and research framework following the Holocaust were oriented toward

Received 2 February 2005; accepted 16 March 2005.

Address correspondence to Liat Ayalon, Langley Porter Psychiatric Hospital, 401 Parnassus Ave., Box CPT, San Francisco, CA 94122, USA. E-mail: liata@lppi.ucsf.edu

explaining and describing the pathology. Term such as survivor syndrome (Neiderland, 1968) or KZ (Chodoff, 1963; Eitinger, 1964) caught on easily and have been employed widely in describing the pathological consequences of the Holocaust and in guiding research on the Holocaust throughout the years.

The Holocaust experience is qualitatively different from other traumatic experiences and, therefore, can provide unique and important information about trauma as well as about resilience. Unlike natural disasters, medical illnesses, or loss of loved ones due to natural occurrences, the traumas suffered by Holocaust survivors were intentionally inflicted by human beings. In addition, unlike many other victims of violence, rape, and abuse, the Holocaust was experienced by a large segment of society at least partially as a group and not only as individuals.

In many ways, the Holocaust is similar to other genocides that took place in Africa, Europe, Central America, and Asia. In all cases, ethnic cleansing took place and entire communities were exposed to murder, abuse, and trauma. These genocides, however, occurred in different cultures and eras. Additionally, even though many times ethnic cleansing was supported by the government, the support was never as explicit and organized as during the Holocaust. Furthermore, though always too late, the world has always responded in an attempt to end the ethnic cleansing in the case of other genocides. World War II, on the other hand, was never initiated in order to end the Holocaust. These characteristics make the Holocaust unique for the study of trauma in its most severe form. Furthermore, the fact that the Holocaust took place more than 50 years ago provides an opportunity to view its effects using a developmental perspective. Its position as the most extreme form of widely experienced trauma makes it useful for the study of resiliency characteristics across different types of traumas.

Unfortunately, to date, not enough research has been conducted on resilience to trauma in Holocaust survivors. While there is an abundance of research on the pathological sequelae of the Holocaust, far less attention has been given to those who, despite exposure to severe atrocities, were able to establish a relative healthy and productive life. Studying those who were able to resume productive functioning following exposure to severe traumas is as important as studying the pathological aspects associated

with trauma, because it provides information about the adaptive nature of human beings. As survivors of the Holocaust are aging and dying, there is an increasing need to identify and document their efforts and means of survival. In order to provide a more realistic view of survivors' experiences, both the pathological and resilient aspects of survival should be studied. This knowledge about the adaptation of aging survivors years after the Holocaust can further guide our work with survivors of other genocides.

Views on Resilience

In psychology, a shift has been taking place in recent years from focusing on the pathological to focusing on the adaptive nature of human beings, and positive psychology has been gaining a respectful place as a valuable paradigm. Terms such as hardiness (Kobasa, 1979), resilience (Rutter, 1985; Werner, 1989), posttraumatic growth (Calhoun & Tedeschi, 1989–1990; Tennen & Affleck, 1999), stress inoculation (Meichenbaum & Novaco, 1985), salutogenesis (Antonovsky, 1991), positive illusions (Taylor & Brown, 1988), and thriving (O'Leary & Ickovics, 1995) have been receiving increased attention and have been studied extensively in relation to a variety of traumatic events, such as struggles with a variety of medical conditions, bereavement, and abuse.

It has been proposed that when individuals are confronted with challenge, they may respond in one of four ways: succumb to the event, survive and continue to function, recover and return to baseline, or thrive by flourishing beyond their original level of functioning (O'Leary & Ickovics, 1995). Resilience has been identified as a relatively homeostatic construct that represents the ability of the individual to restore equilibrium (Carver, 1998). Other definitions of resilience include the capacity for recovery and maintenance of adaptive functioning following incapacity (Garmezy, 1991), the positive side of adaptation following exhaustive circumstances (Masten, 1989), or sustained competence under stress (Werner, 1995; Werner & Smith, 1992).

Protective mechanisms associated with resilience include both individual and social resources (Garmezy, 1983). Individual characteristics that are considered to be protective include intelligence, positive temperament, sociability, communication skills (Garmezy, 1991), beliefs in internal control (Tedeschi & Calhoun, 1995),

self-efficacy, a sense of coherence, hardiness (Moos & Schaefer, 1990; Tedeschi & Calhoun, 1995), optimism (Folkman, 1997; Moos & Schaefer, 1990; O'Leary & Ickovics, 1995; Tedeschi & Calhoun, 1995), and active problem-oriented coping ability (Tedeschi & Calhoun, 1995). Social factors, such as positive parent-child attachment, parental warmth, family cohesion, close relationships with caring adults, social support, nonpunitive social environments, and supportive communities, also have been associated with resilience (Garmezy, 1991; Olsson et al., 2003). It has been acknowledged that resilience in one sphere does not guarantee resilience in other spheres and that positive and negative effects of trauma and stress can co-occur (Ryff & Singer, 2003).

Resilience in Holocaust Survivors

Researchers who have attempted to identify nonpathological aspects associated with the Holocaust have concluded that it is difficult to make a distinction between the pathological and the nonpathological aspects of the Holocaust because the two often co-occur (Davidson, 1992; Langer, 1990). It has been argued that the majority of survivors demonstrate psychological vulnerability. Yet, many of these symptoms are considered normative given the level of exposure to traumatic experiences (Davidson, 1992). Others have argued that the sheer ability to continue with one's life after the Holocaust provides an evidence of resilience (Frankl, 1963) and that survivors are relatively similar in their functioning to the general population (Hass, 1995; Leon, Butcher, Kleinman, Goldberg, & Almagor, 1981). Furthermore, Shanan and Shahar (1983) found that, relative to a control group, Holocaust survivors tended to be more task oriented, to cope more actively, and to express more favorable attitudes toward family, friends, and work. Holocaust survivors also reported more stability and satisfaction with their current situation. Based on a review of the literature, Lomranz (1995) argued that scientifically sound research on the Holocaust has shown that survivors manifest levels of adaptation and well-being that are similar to or greater than those of non-Holocaust populations.

A development perspective of recovery and adaptation following the Holocaust has been identified by several researchers

(Davidson, 1992; Fogelman, 1991; Hass, 1995). These researchers have argued that, following liberation, different responses became adaptive at different periods of the survivor's life. During the initial stages of liberation, survivors adapted by using denial and by rebuilding their family and community. This stage was followed by an outburst of emotional grief reactions in later years due to the realization of the magnitude of their loss. In the final stage, survivors tended to search for meaning in their experiences and attempted to attain a sense of connection with their past.

Based on past research, a variety of factors associated with resilience in Holocaust survivors have been identified. These include personality characteristics, factors associated with conditions during the war, and factors associated with postwar conditions. Because of the extreme nature of the Holocaust, some have argued that prewar conditions had little effect on postwar adaptation (Rappoport, 1968), and almost no attempt has been made to study the role of prewar conditions.

Personality characteristics identified as contributing to resilience and to better adaptation among survivors include denial and overactivity, particularly during the war and immediately after the war (Davidson, 1992); the use of instrumental coping (Harel, Kahana, & Kahana, 1988); and the use of compensatory mechanisms such as constriction of cognitive functioning and detachment (Shanan & Shahar, 1983). Belief in God, belief in being special because of surviving past traumatic experiences, and the ability to enjoy life despite the uncertainty of the future also are considered adaptive mechanisms (Greene, 2002; Hass, 1995). Based on interviews with Holocaust survivors, Helmreich (1992) suggested 10 qualities that assisted survivors to adapt to their new life after the war: flexibility, assertiveness, tenacity, optimism, intelligence, distancing ability, group consciousness, assimilating the knowledge of survival, finding meaning in one's life, and courage.

Factors related to conditions during the war that are associated with resilience include retaining contact with family members or friends during the war, establishing social contacts and being able to obtain social support, and having better access to food and shelter (Davidson, 1992; Hass, 1995). Experiencing torture and starvation for a shorter period of time or with less severity also has been identified as contributing to better postwar adaptation (Rosen, Reynolds, Yaeger, Houck, & Hurwitz, 1991). Younger

age during the Holocaust was identified by several researchers as an advantage, because youth showed greater flexibility and openness to experiences that allowed them to rebuild their lives after the war (Davidson, 1992; Hass, 1995). However, in contrast, quantitative research has shown that younger age during the Holocaust was associated with greater psychopathology in later years (Shanan & Shahar, 1983).

It also has been argued that the social context after the war played an important role in survivors' recovery. Many of the survivors immigrated to Israel, where they were immediately forced to engage in building a new society. The unstable security situation in Israel provided survivors with an outlet for personal anger (Hass, 1995), while the matter-of-fact attitude with which the Israeli society had treated survivors helped them in their efforts to rebuild their lives (Davidson, 1992). In addition, the kibbutz, a communal living arrangement adapted by some survivors who settled in Israel, provided an adaptive structure because it assisted in replacing the destroyed family structure (Klein & Reinharz, 1972). Researchers have also found that those survivors who participated in communal activities, felt part of the community, had a supportive family, engaged in artistic expression, gave testimonies, and attended self-help groups were more successful in their efforts to rebuild their lives (Davidson, 1992; Greene, 2002; Harel et al., 1988; Hass, 1995).

Challenges Associated With the Study of Resilience in Holocaust Survivors

The study of resilience to trauma in Holocaust survivors has been limited for a number of reasons. The pathological aspects associated with the Holocaust experience are so salient and easy to detect that they immediately call for attention. Research that does not focus on the pathological carries the risk of underestimating or even minimizing the horrible consequences of the Holocaust. This not only undermines the personal experiences of Holocaust survivors, but also has dangerous political implications because of the risk that some may use the findings as a means to deny the horrendous effects of the Holocaust. At the same time, not mentioning the adaptive nature of some of the survivors pathologizes their experiences. To complicate things, impairment was financially rewarded following the

war; survivors were eligible for compensation from Germany only if they demonstrated direct physical or psychological sequelae associated with the Holocaust (Davidson, 1992). This guided both researchers' and subjects' focus on the pathological. Another conflict faced by survivors and researchers was the fact that demonstrating the long-term pathological effects of the Holocaust implied for survivors that they were defeated, whereas denying the existence of such effects suggested that the war was benign (Hass, 1995).

Initially, the majority of research on the Holocaust was guided by psychoanalytic and psychodynamic theories (Lomranz, 1995). While later attempts were made to more rigorously study pathological aspects associated with the Holocaust independently of a psychodynamic or a psychoanalytic orientation, no such efforts were made to study the resilient factors associated with survival. Furthermore, most initial research on the Holocaust was conducted by psychiatrists, and therefore those survivors who sought psychiatric help were most easily accessible for research purposes. Most research on resilience and adaptation is based on case studies or qualitative interviews that are often combined with personal experiences of the authors, with little attempt to systematically identify factors associated with resilience. The use of convenience samples and the lack of well-defined control groups are additional weaknesses of this line of research. In addition, past research did not distinguish adequately between survivors. The term Holocaust survivor was poorly defined and often included Jews who lived in Germany under the Nazi regime but had left Germany prior to World War II, those who lived in hiding during the war, and those who lived in concentration and death camps (Fogelman, 1991) as well as non-Jews who were subject to Nazi persecution. While all of these individuals were affected by the Nazi regime, their experiences likely have been dramatically different.

While studies of the Holocaust provide unique opportunities for understanding the effects of trauma at the individual and societal levels, the experiences are heterogeneous and vary dramatically across individuals. Length of exposure to trauma, types of traumas experienced or observed, and extent of loss are likely to be important in explaining postwar adaptation. All of these variables are extremely difficult to assess because of their subjective nature (Krinsley & Weathers, 1995). The fact that the Holocaust took place over 50 years ago also makes it difficult to identify the particular ingredients responsible for pathological versus

nonpathological aspects. Throughout the years, many confounding variables may have had an effect on survivors' levels of functioning, and the time elapsed may have affected the ability of survivors to describe their past experiences. Furthermore, it has been demonstrated that recall of traumatic events is influenced by memory problems, biases, distortions, and underreporting of events (Vrana & Lauterbach, 1994; Zimmerman, 1983) and that accurate recall is most likely to occur for events taking place in the recent past (Clements & Turnip, 1996).

A common definition of resilience such as a homeostatic return to premorbid functioning (Carver, 1998) is difficult to study. This definition involves certain assumptions about the individual's premorbid conditions. Given that most living survivors were relatively young at the time of the Holocaust and that most survivors were exposed to traumatic events over a period of several years, return to premorbid functioning can be considered as a regression and not necessarily as a sign of adaptation. A more adequate definition in the case of Holocaust survivors would be the ability to adapt adequately socially and professionally to postwar situations. However, this definition also is difficult to assess empirically because of its subjective nature and lack of universal standards.

Only a small fraction of the Jews who lived in Europe prior to World War II survived. Therefore, it is likely that those Jews who survived the war represent a unique group (Weinfeld, Sigal, & Eaton, 1981). Research on Holocaust survivors has to take into consideration the fact that survivors may have been a more resilient group to begin with, especially those who are still alive decades following the Holocaust. Furthermore, even when nonpsychiatric samples are studied, it is likely that those who agree to participate in such studies represent a selective group of survivors. This is supported by the finding that giving testimonies serves as a positive coping method and that the ability to reflect on one's life and integrate past experiences is highly therapeutic for trauma survivors (Tedeschi & Calhoun, 1995).

Future Directions

To date, there has been almost no systematic research on factors associated with resilience to trauma in Holocaust survivors. Several directions should be taken in order to provide more

comprehensive and useful information on the topic. First, research in nonclinical populations is much needed. Research should more rigorously focus on the personality characteristics, coping style, social context (i.e., family, community, and country of residency), and cultural background of Holocaust survivors as well as on the second and third generations of survivors.

Second, most of the research on the topic has been qualitative. Much of this research did not distinguish between the personal experiences and views of the researchers and the findings based on interviews of survivors. Furthermore, most researchers did not adequately describe the qualitative methodology employed to obtain or analyze the results. In addition, researchers did not attempt to use quantitative methodology to support qualitative findings. Initially, research is likely to remain primarily qualitative in nature because of the dearth of information. Also, because of the long period of time elapsed, most research is likely to be retrospective in nature. However, research should employ a more rigorous methodology of selecting or sampling both survivors and controls by preselecting dimensions for comparison, such as demographic characteristics or trauma experiences. Assessing multiple groups of survivors and controls may assist in better capturing their heterogeneity and complexity (Shmotkin & Lomranz, 1998).

Third, a more systematic distinction among pre-Holocaust, Holocaust, and post-Holocaust experiences should occur, and resilience factors should be identified according to their specific occurrence in time. Fourth, despite theoretical advances in the general literature on the nature of resilience and adaptation to trauma, there has been no attempt to integrate the current research paradigm into the study of the Holocaust. Testing the applicability of some of the theoretical models of resilience and adaptation to the Holocaust experience is likely to provide important information about the similarities and distinctions between the Holocaust experience and other traumas. The use of common measures of growth and resilience may be justified and may contribute to the connection between recent trends in psychology and the study of the Holocaust.

Fifth, because the Holocaust took place several decades ago, there is an opportunity to assess survivors' ability for resilience not only based on reports of past experiences, but in relation to current stressors in their life. This may provide a developmental

perspective that outlines the connection between the ability to adjust to past traumas during childhood and adolescence and the ability to cope with traumas in late adulthood.

Finally, while there is a plethora of research on survival guilt following the Holocaust, there is no research on the ability of survivors to solve their moral dilemmas and resolve their feelings of guilt. This line of research may have important implications for the understanding of posttrauma adaptation in Holocaust survivors.

References

Antonovsky, A. (1991). The structural sources of salutogenic strengths. In C. L. Cooper & R. Payne (Eds.), *Individual differences: Personality and stress* (pp. 67–104). New York: Wiley.

Calhoun, L. G. & Tedeschi, R. G. (1989–1990). Positive aspects of critical life problems: Recollection of grief. *Omega*, *20*, 265–272.

Carver, C. S. (1998). Resilience and thriving: Issues, models, and linkages. *Journal of Social Issues*, *54*, 245–266.

Chodoff, P. (1963). Late effects of the concentration camp syndrome. *Archives of General Psychiatry*, *8*, 323–333.

Clements, K. & Turnip, G. (1996). The Life Events Scale for Students: Validation for use with British samples. *Personality and Individual Differences*, *20*, 747–751.

Davidson, S. (1992). *Holding on to humanity–The message of Holocaust survivors: The Shamai Davidson papers.* (W. Charny Ed.), New York: New York University Press.

Eitinger, L. (1964). *Concentration-camp survivors in Norway and Israel.* Oslo: Universitetsforlaget.

Fogelman, E. (1991). Survivor-victims of war and holocaust. In D. Leviton (Ed.), *Horrendous death and health: Toward action* (pp. 37–45). Washington, DC: Hemisphere.

Folkman, S. (1997). Positive psychological states and coping with severe stress. *Social Science and Medicine*, *45*, 1207–1221.

Frankl, V. E. (1963). *Men's search for meaning.* Oxford, England: Washington Square Press.

Garmezy, N. (1983). Stressors of childhood. In N. Garmezy & M. Rutter (Eds.), *Stress, coping, and development in children* (pp. 43–84). New York: McGraw-Hill.

Garmezy, N. (1991). Resilience in children's adaptation to negative life events and stressed environments. *Pediatric Annals*, *20*, 459–466.

Greene, R. R. (2002). Holocaust survivors: A study in resilience. *Journal of Gerontological Social Work*, *37*, 3–18.

Harel, Z., Kahana, B., & Kahana, E. (1988). Psychological well-being among Holocaust survivors and immigrants to Israel. *Journal of Traumatic Stress Studies*, *1*, 413–428.

Hass, A. (1995). *The aftermath: Living with the Holocaust.* New York: Cambridge University Press.

Helmreich, W. (1992). *Against all odds.* New York: Simon & Schuster.

Kahana, B., Harel, Z., & Kahana, E. (1989). Clinical and gerontological issues facing survivors of the Nazi Holocaust. In P. Marcus & A. Rosenberg (Eds.), *Healing their wounds: Psychotherapy with Holocaust survivors and their families* (pp. 197–211). New York: Praeger.

Klein, H. & Reinharz, S. (1972). Adaptation in the kibbutz of Holocaust survivors and their families. In L. Miller (Ed.), *Mental health in rapid social change* (pp. 302–319). Jerusalem Academic Press.

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

Krinsley, K. E. & Weathers, F. W. (1995). The assessment of trauma in adults. *National Center for Post-Traumatic Stress Disorder Research Quarterly, 6*, 3–16.

Kuch, K. & Cox, B. (1992). Symptoms of PTSD in 124 survivors of the Holocaust. *American Journal of Psychiatry, 149*, 337–340.

Langer, L. L. (1990). *Holocaust testimonies: The ruins of memory.* New Haven, CT: Yale University Press.

Leon, G. L., Butcher, J. N., Kleinman, M., Goldberg, A., & Almagor, M. (1981). Survivors of the Holocaust and their children: Current status and adjustment. *Journal of Personality and Social Psychology, 41*, 503–516.

Lomranz, J. (1995). Endurance and living: Long-term effects of the Holocaust. In S. E. Hobfoll & M. W. de Vries (Eds.), *Extreme stress and communities: Impact and intervention* (pp. 325–352). Amsterdam: Kluwer Academic.

Masten, A. S. (1989). Resilience in development: Implications of the study of successful adaptation for developmental psychopathology. In D. Cicchetti (Ed.), *The emergence of discipline: Rochester symposium on developmental psychology.* (Vol. 1, pp. 261–294). Hillsdale, NJ: Erlbaum.

Meichenbaum, D. & Novaco, R. (1985). Stress inoculation: A preventative approach. *Issues in Mental Health Nursing, 7*, 419–435.

Moos, R. H. & Schaefer, J. A. (1990). Coping resources and processes: Current concepts and measures. In H. S. Friedman (Ed.), *Personality and disease* (pp. 234–257). Washington, DC: American Psychological Association.

Niederland, W. G. (1968). Clinical observations on the "survivor syndrome." *International Journal of Psycho-Analysis, 49*, 313–315.

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

Olsson, C. A., Bond, L., Burns, J. M., Vella-Brodrick, D. A., & Sawyer, S. M. (2003). Adolescent resilience: A concept analysis. *Journal of Adolescence, 26*, 1–11.

Rappoport, E. A. (1968). Beyond traumatic neurosis: A psychoanalytic study of late reactions to the concentration-camp trauma. *International Journal of Psycho-Analysis, 49*, 719–731.

Rosen, J., Reynolds, C., Yaeger, A., Houck, P., & Hurwitz, L. (1991). Sleep disturbances in survivors of the Nazi Holocaust. *American Journal of Psychiatry, 148*, 62–66.

Rubenstein, I., Cutter, F., & Templer, D. I. (1989–1990). Multigenerational occurrence of survivor syndrome symptoms in families of Holocaust survivors. *Omega, 20*, 239–244.

Rutter, M. (1985). Resilience in the face of adversit: Protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry, 147*, 598–611.

Ryff, C. D. & Singer, B. (2003). Flourishing under fire: Resilience as a prototype of challenged thriving. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived.* Washington, DC: American Psychological Association.

Shanan, J. & Shahar, O. (1983). Cognitive and personality functioning of Jewish Holocaust survivors during the midlife transition (44–65) in Israel. *Archive fur Psychologie, 135*, 275–294.

Shmotkin, D. & Lomranz, J. (1998). Subjective well-being among Holocaust survivors: An examination of overlooked differentiations. *Journal of Personality and Social Psychology, 75*, 141–155.

Taylor, S. E. & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin, 103*, 193–210.

Tedeschi, R. G. & Calhoun, L. G. (1995). *Trauma and transformation: Growing in the aftermath of suffering.* Thousand Oaks, CA: Sage.

Tennen, H. & Affleck, G. (1999). Personality and transformation in the face of adversity. In R. G. Tedeschi, C. L. Park, & L. G. Calhoun (Eds.), *Posttraumatic growth: Positive changes in the aftermath of crisis* (pp. 65–98). Mahwah, NJ: Erlbaum.

Vrana, S. & Lauterbach, D. (1994). Prevalence of traumatic events and posttraumatic psychological symptoms in a nonclinical sample of college students. *Journal of Traumatic Stress, 7*, 289–302.

Weinfeld, M., Sigal, J. J., & Eaton, W. W. (1981). Long-term effects of the Holocaust on selected social attitudes and behaviors of survivors: A cautionary note. *Social Forces, 60*, 1–19.

Werner, E. E. (1989). High-risk children in young adulthood: A longitudinal study from birth to 32 years. *American Journal of Orthopsychiatry, 59*, 72–81.

Werner, E. E. (1995). Resilience in development. *Current Directions in Psychological Science, 4*, 81–85.

Werner, E. E. & Smith, R. S. (1992). *Vulnerable but not invincible: A longitudinal study of resilient children and youth.* New York: McGraw-Hill.

Zimmerman, M. (1983). Methodological issues in the assessment of life events: A review of issues and research. *Clinical Psychology Review, 3*, 339–370.

Liat Ayalon is a clinical psychology fellow at the University of California, San Francisco. She is currently completing her second year of fellowship under a Health Resources and Services Administration grant. Her research interests include mental health services among the ethnic minority elderly and resilience to trauma.