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**CHILDREN OF HOLOCAUST SURVIVORS: RELATIONS OF PERCEIVED
PARENTAL TRAUMATIZATION TO ATTACHMENT STYLES**

By

Ellen Berger

A DISSERTATION

**Submitted to
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In partial fulfillment of the requirements
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ABSTRACT

CHILDREN OF HOLOCAUST SURVIVORS: RELATIONS OF PERCEIVED PARENTAL TRAUMATIZATION TO ATTACHMENT STYLES

By

Ellen Berger

Existing research on the effects of the Holocaust on the second generation has yielded contradictory findings. It is likely that within-group differences in this heterogeneous population accounts for some of these contradictory findings. This study explores the relationship between perceived parental traumatization from the Holocaust and attachments to parents and romantic partners. Attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1988) is utilized as a theoretical framework. Numerous studies have shown how attachment style is affected by trauma, as well as how these effects are transmitted from one generation to the next. The present study will investigate the relations between a parent's Holocaust traumatization and their adult offspring's attachment style.

This is dedicated to my friend Randy Leipzig, whose adolescent suicide provided an enduring lesson on the legacy of trauma.

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Chapter 1

Introduction

The Nazi Holocaust was a systematically planned destruction of human life which began with Hitler's rise to power in 1933 and continued until the end of World War II (WWII), when Germany was defeated and the Allies freed the concentration camps. Approximately 12 million civilians were killed in the Holocaust, 6 million of them Jews. Ninety percent of the Jews living in Poland, Estonia, Latvia, Lithuania, Germany, and Austria disappeared (Epstein, 1979). While other groups were targeted for discrimination and death under Nazi rule, no other group received the level of systematic persecution and destruction as the Jews.

Anti-Jewish legislation began immediately upon Hitler's appointment to the position of Chancellor of Germany. Jewish businesses were boycotted, Jews were forbidden to work in civil service or the military and were not allowed to practice law (Dawidowicz, 1975). However, the Holocaust is generally considered to have been initiated with Kristallnacht on November 9-10, 1938. On that evening, Jewish homes and stores were looted. Synagogues and their Torahs, the holy texts, were burned. Jews were imprisoned and murdered. After this, other restrictions on Jews were gradually implemented. All Jews were required to wear a yellow star, visible on the outside of their clothing, with the word "Jude" denoting them as such. Non-Jewish Germans were not allowed to marry Jews or to frequent their businesses. Jews had to leave their homes and move into locked ghettos. Later, they were rounded up and deported to concentration camps.

The Survivors

The group of Jewish individuals who survived the Holocaust is a heterogeneous one. It includes people of various nationalities and social class. A survivor might have been a wealthy, educated merchant in Germany, who identified more with being a German than being a Jew. He/she might have converted to Catholicism or another religion and may not have associated with other Jews or considered themselves to be Jewish. At the other end of the spectrum, the survivor may have been a poor, uneducated teenager living in a shtetl (an all-Jewish ghetto) in Poland. Some survivors lived through concentration camps designed for killing, others through labor or slave camps. Still others lived by hiding in the woods, in a cramped hiding place in someone's home, or by obtaining false identity papers. A person now identified as a survivor may have been a baby hidden during the Holocaust. The current age ranges, country of residence, and language of survivors is diverse. Some returned to their home country after the war, others to the newly formed State of Israel and still others to the United States. Some fled to South America, which was ironically also the new home of many former Nazis (Epstein, 1979).

While the majority of Holocaust survivors appear to have suffered greatly from the Holocaust, there seem to be differences in the ways they coped with the trauma. Several authors have indicated that survivors who became parents were most likely to either remain silent about the Holocaust or to talk about it at length, in great detail to their children (Fogelman, 1992; Rosenbloom, 1995; Wardi, 1994). Some parents, however, may have been more able to take their children's developmental level into account and to reveal only what was most appropriate for the child (Rosenbloom, 1995).

Children of Survivors

According to Epstein (1979), survivors' difficulties did not disappear as they began to raise children. "On the contrary, as the children of survivors began to reach their teens, coming closer to the age at which their parents were imprisoned, new problems appeared." (p. 91). Krystal (1968) reported "We now see increasing numbers of children of survivors suffering from problems of depression and inhibition of their own function" (in Epstein, p. 91).

Thus far, those authors who have studied the effects of the Holocaust on the second generation within a theoretical framework have typically done so in the psychoanalytic tradition. Attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1988) describes how individuals' mental models are created and become self-perpetuating ways of dealing with others. There is also a great deal of research on how attachment styles are transmitted intergenerationally. This theory seems particularly relevant to the population of Holocaust survivors and their children as it specifically addresses issues of unresolved trauma and its implications for children of traumatized parents.

Trauma

Herman (1992) defined psychological trauma as "an affliction of the powerless. Traumatic events overwhelm the ordinary systems of care that give people a sense of control, connection, and meaning" (In Grame, Tortorici, and Healey, 1999, p. 224). Individuals who survived the Holocaust clearly experienced psychological trauma. They were rendered powerless by the Nazi regime, and their "ordinary systems of care" were overwhelmed.

Children of Holocaust survivors, (COS), then, were raised by trauma survivors. There is some research that demonstrates how individuals classified as having unresolved loss or trauma are more likely to have children classified with an insecure attachment style. Much of the current research in adult attachment theory is based on asking adults about their perceptions of their early attachment relationships. The current study focuses on the children of survivors' perceptions of their parents' traumatization, and how that is related to their current attachments to their parents and significant others. It will further explore the relationship of these variables to family interconnectedness and dependency.

Attachment Theory as a Theoretical Framework

Several attachment classification systems have emerged (Ainsworth, Blehar, Waters, & Wall, 1978; Bartholomew & Horowitz, 1991; George, Kaplan, & Main, 1985) for identifying the attachment styles of children and adults. All identify one “secure” pattern of attachment, characterized by a model of the self as worthy of love and a model of others as trustworthy and available. There are several variants of the “insecure” patterns of attachment, but they generally include a difficulty in trusting others, a lack of belief in the inherent worth of the self, and general interpersonal difficulties (Brennan, Shaver, & Tobey, 1991; Hazan & Shaver, 1987; Lopez, 1995).

Numerous studies have found that children who are traumatized are more likely to be classified as having an insecure style of attachment than those who are not (Crittenden, 1988; Egeland & Sroufe, 1981; Schneider-Rosen, Braunwald, Carlson, & Cicchetti, 1985). Cohn, Cowan, Cowan, & Pearson (1992), and Rholes, Simpson, & Blakely (1995) found links between attachment styles and parenting, with insecure attachment styles associated with more difficulties in parenting (e.g., providing less

structure and warmth, experiencing less closeness with their children). Others (Ainsworth & Eichberg, 1991; Grossmann, Fremmer-Bombik, Rudolph, & Grossmann, 1988; Main & Hesse, 1990) examined the intergenerational transmission of attachment style. These authors found a high concordance between the attachment styles of mothers and their infants. In addition, two studies (Ainsworth & Eichberg; Main & Hesse), found that all of the mothers in their studies who were classified as having an unresolved loss of an attachment figure had infants classified as insecurely attached. It seems likely, therefore, that Holocaust survivors who did not resolve their trauma would be more likely to have children with insecure attachment styles.

Bowlby (1988) describes how

a mother, who herself had a childhood deprived of love, seeks from her own child the love she has hitherto lacked...What is of special relevance here is that more often than not the child is expected to be grateful for such care as he receives and not to notice the demands being made upon him. (p. 107).

Stories from children of survivors echo this theme: "I always put other people's needs, especially my parents' needs, first. I just couldn't do anything that might hurt them." (Hass, 1990, pp. 41-42). Some children of survivors have been able to identify how this pattern extends to later relationships: "I always felt responsible for my parents' unhappiness, so when I am with a lover, I am overly threatened when they are unhappy. I feel that somehow I'm the cause of it." (Hass, p. 42).

Empirical Studies of Children of Holocaust Survivors

The empirical studies of children of Holocaust survivors have led to mixed conclusions. Some (e.g., Baron, Reznikoff, & Glenwick, 1993; Rieck, 1994) have found

that this population does not differ from controls or has some strengths compared to controls. Some of the findings of similarity have included the following: sociability, self-acceptance, and social presence (Baron et al.), frequencies of referrals for psychological treatment, performance on Full Scale and Verbal IQ measures as well as the developmental indicators of Human Figure Drawings (Rieck, 1994), and rates of psychological symptoms at the time of assessment (Schwartz, Dohrenwend, & Levav, 1994).

While these studies found no differences between children of Holocaust survivors and controls in the areas listed above, other studies have found that children of survivors do have significant difficulties compared to controls. Some of these difficulties include the following: Children of Holocaust survivors show more psychological dependency on their parents and have more difficulty with intimacy in their marital relationships (Mazor & Tal, 1996), male children of survivors scored lower than controls on the emotional indicators of Human Figure Drawings (Rieck, 1994), and children of survivors reported higher lifetime prevalence of depression and anxiety (Schwartz, Dohrenwend, & Levav, 1994).

One possible reason for this variability in findings relating to children of Holocaust survivors is the nature of this heterogeneous group and the methods of recruiting participants. Yehuda, Schmeidler, Elkin, et al. (1998) noted that "the literature on the offspring of Holocaust survivors is divided into two 'camps': those who described the adverse effects of the Holocaust, and those failing to note these detrimental effects." (p. 640). She attributed this dichotomy of findings to the heterogeneity of the population studied. She suggested "exploring the effects of the Holocaust on offspring based on

whether they may have been raised by more or less symptomatic parents might yield... clarity with regard to intergenerational syndromes." (p. 641). Generally, those studies that utilized clinical samples found more evidence of psychopathology, while those studies that recruited from the general population of children of survivors found fewer differences from controls. Studies that recruited from a general population of children of survivors tended to find relational difficulties rather than symptoms of psychopathology. A primary goal of this study is to recruit a sample of children of Holocaust survivors from the general population and specifically to examine within-group differences based on perceptions of resolution of parents' trauma. Also, this study will be focusing on the effects of the Holocaust on relationships, rather than on psychopathology.

Emotional Dependency on Family of Origin

Several researchers have found a relationship between COS status and emotional dependency. Mazor and Tal (1996) found that children of Holocaust survivors were more emotionally dependent on their families of origin than a control group. Brom, Kfir, and Dasberg (2001) found that female COS had greater difficulty with separation/individuation than a control group. A review of the literature by Last (1988) concluded that Israeli and American COS were more dependent than a control group. Wardi (1994) suggested that COS have difficulties with separation issues as they hold the expectations of the parent to make up for all of the lost family members. The current study will attempt to explicate the relationship between COS status and emotional dependency on family of origin. It seems likely that emotional dependency on family of origin will be related to perceived parental traumatization and to attachment security.

Relevance to Counseling Psychology

The relevance of adult attachment theory to the field of counseling psychology has previously been established (Lopez, 1995). According to Gelso and Fretz (1992), “three roles have been central [to counseling psychology]: the remedial, the preventive, and the developmental” (p. 5). The examination of the effects of the trauma related to the Holocaust are relevant to counseling psychology as counseling psychologists are interested in the remediation of difficulties, including traumas. “More counseling psychologists devote more time to this role than to the others.” (Gelso & Fretz, p. 6). A better understanding of the second-generation effects of the Holocaust is likely to lead to further understanding of second-generation effects of other traumatic experiences. This study proposes to expand our knowledge from the effects of parents’ trauma on young children’s attachment styles to the relationships between perceptions of parents’ trauma and their adult offsprings’ attachment styles. This should lead to direct implications for intervention and hopefully prevention of difficulties in the next generation, which is also a goal of counseling psychology.

Problem Statement

Holocaust survivors have been described as having undergone massive psychic trauma (Krystal, 1968) for which they continue to show symptoms for their entire lives (Fogelman, 1992; Wardi, 1994). The studies that have been conducted thus far, however, leave some sizable research gaps. Those that have focused on the Holocaust survivor population have resulted in mixed findings, with no clear conclusions that would lead to greater understanding for intervention. No empirical studies have directly examined the

impact of the Holocaust from an attachment theoretical perspective, despite its relevance for understanding this population.

The studies on the effects of trauma from an attachment theory perspective also leave some gaps. These studies have established that children and adults who are traumatized are more likely to have an insecure attachment style than the general population (Crittenden, 1988; Egeland & Sroufe, 1981; Stalker & Davies, 1995). They indicate that security of attachment style is associated with specific parenting behavior, with insecure attachment styles being associated with more parenting difficulties (Cohn, Cowan, Cowan, & Pearson, 1992; Rholes, Simpson, & Blakely, 1995). Finally, they suggest that mothers who are traumatized and do not resolve their traumas are more likely to have children with insecure attachment styles (Ainsworth & Eichberg, 1991; Main & Hesse, 1990). However, only one study has examined the parent's unresolved trauma from the perspective of their adult offspring, and that one used a problematic measure of parental traumatization (Blumenthal, 1981). None has examined the effects of perceived parental unresolved trauma on the adult offspring's attachment style and none have investigated the Holocaust population specifically. One study examined the impact of parental Holocaust experience on offsprings' family interconnectedness, but it did not take attachment theory into account. The current study will attempt to determine whether the perception of parental Holocaust traumatization is associated with the attachment security of their children as well as their children's dependence on and interconnectedness with family members. It will also explore the relationships between the perception of trauma, attachment security, and family interconnectedness. This will

advance the current knowledge base of attachment research and literature. It potentially will have important implications for practice as well.

This study proposes to investigate the following research questions:

- 1) Among adult children of Holocaust survivors (COS), is parent-adult attachment security related to perceived parental trauma?
- 2) Is there a relationship between perceptions of parental Holocaust traumatization and COS attachment security in relation to romantic partners?
- 3) Is there a relationship between perceptions of parental Holocaust traumatization and COS emotional dependency/psychological interconnectedness with their family of origin?

It is hypothesized that the children of survivors who view their parents as having more unresolved trauma from the Holocaust will have less secure attachments to their parents and their romantic partners than children of survivors who view their parents as having more completely resolved the trauma of the Holocaust. Children of survivors who view their parents as having less resolved trauma from the Holocaust will be more interconnected with/dependent on their family. Those with insecure attachments to their parents will be more likely to be interconnected.

Since insecure attachment styles have been linked to a variety of difficulties, including difficulties with information processing in college students (Mikulincer, 1997) and personality disorders in college students (Brennan & Shaver, 1995) it seems clear that part of our mission as counseling psychologists should be to help more individuals become and remain securely attached.

Chapter 2

Review of the Literature

This chapter will provide a brief introduction to attachment theory. It will then review the literature in six areas relevant to the present study: attachment and trauma, intergenerational transmission of attachment styles, vicarious traumatization, other types of trauma and its transmission, children of Holocaust survivors, and attachment theory and the Holocaust. The review of the literature on attachment and trauma will provide evidence for the significant relationship between trauma and insecure attachment styles – individuals who have been traumatized are more likely to have insecure attachment styles. There is also a great deal of research on the intergenerational transmission of attachment styles, which will demonstrate that individuals who are insecurely attached are more likely to have children who are insecurely attached. Combining these literatures provides compelling evidence for the likelihood that individuals traumatized by the Holocaust will be more likely to have children with insecure attachment styles. The current literature on children of Holocaust survivors is mixed in its findings on the effects of their parents' trauma, but no study has yet systematically examined the attachment style of children of Holocaust survivors. The sparse literature on the relationship between attachment and the Holocaust will be reviewed. The current paucity of this literature points to the need for more research. Finally, research on other types of trauma will be reviewed to determine whether similar effects from trauma, particularly the intergenerational transmission of trauma, may be generalized to the population of children of Holocaust survivors. This chapter will integrate these currently disparate

topics to provide a strong conceptual and empirical rationale for the hypotheses generating the current study.

Attachment theory

Attachment theory, as developed by Bowlby and Ainsworth (Bretherton, 1992), was initially formulated on the basis of observations of infants and young children with their mothers. The theory originated out of the psychoanalytic movement, as Bowlby was trained as an analyst, but departed from that movement by emphasizing childrens' real (vs. fantasized) relationships with their caretakers.

Bowlby believed that attachment behavior is pre-programmed and has an evolutionary purpose, "a fundamental form of behaviour with its own internal motivation distinct from feeding and sex, and of no less importance for survival". Attachment behavior is activated "whenever the person is frightened, fatigued or sick, and is assuaged by comforting and caregiving." (Bowlby, 1988, p. 27).

Ainsworth coined the term "secure base" (Bretherton, 1992) to describe a caretaker's function for the young child. By this she meant that to the extent to which a child felt the caretaker was available and responsive in times of need, he or she could feel safe in exploring the environment. When feeling threatened, the child would return to the secure base provided by the parent. Ainsworth developed the "strange situation" observational methodology (Ainsworth, Blehar, Waters, & Wall, 1978), which, in combination with home visits and naturalistic studies of infants and mothers, was used to classify young children into one of several attachment groups. In this procedure, 1-year-old children and their mothers were placed into a laboratory playroom, where a stranger later joined them. The mother briefly left the baby playing with the stranger and then

returned, then both the mother and the stranger briefly left the baby alone in the playroom, and finally the mother returned. The infants were classified into one of three attachment styles based on observations of their exploratory behavior and their response to reunification with their mothers. The "secure" infants appeared to experience the mother as a secure base and to have a positive internal working model of the self. The "anxious-ambivalent" infants were dependent on the presence and approval of others for validation of their own self-worth and appeared to experience their mothers as inconsistent in their availability. The "avoidant" infants appeared to have developed negative internal working models of themselves and others as a result of being consistently rejected by the mother.

Bowlby described people's "internal working models" as a way for the individual to evaluate the availability and responsiveness of others and to evaluate the acceptability of the self (Bowlby, 1973). These working models are derived from the individual's experiences with early attachment figures. The young child who experiences a secure attachment to a caretaker who is sensitively attuned to the child's needs, develops internal working models of him or herself as worthy of love and models of others as being available in times of need. Bowlby considered these models to be stable through adulthood, as he reported, "It is not difficult to understand why patterns of attachment, once developed, tend to persist"(Bowlby, 1988, p. 169). It is important to note, however, that while attachment styles tend to be self-perpetuating, there is evidence that individuals can develop a secure attachment style from an insecure one by experiencing a secure base later in life (Egeland & Sroufe, 1981; Pearson, Cohn, Cowan, & Cowan, 1994).

Despite the original formulation of attachment behavior being activated throughout the lifespan, it is only relatively recently that research has been expanded to adult attachment. Hazan and Shaver (1987) first proposed that romantic love could be conceptualized as an attachment process. This proposition inspired a new wave of research on adult attachment. Stimulating much of this recent literature was the development of the four-category taxonomy of attachment styles by Bartholomew and Horowitz (1991), which is based on the individual's internal working model of self and other. The "secure" individual has a positive internal working model of self and other. The "preoccupied" individual has a negative internal working model of self but a positive model of other. The "dismissive" individual has a positive working model of self but a negative working model of other. The "fearful" individual has a negative internal working model of self and other. The various insecure attachment styles have been associated with a host of undesirable outcomes: Persons with insecure attachment styles are more at risk for depression (Carnelley, Pietromonaco, & Jaffe, 1994; Zuroff & Fitzpatrick, 1995), personality disorders (Brennan & Shaver, 1998) and loneliness (Hazan & Shaver, 1987). Individuals with secure attachment styles are better able to cope with stress and negative emotions (Lopez & Brennan, 2000).

Attachment and Trauma

There has been a great deal of research on the effects of trauma on patterns of attachment. The studies of children and adults have been conducted independently, with little if any reference to each other. This may be due in part to differences in assessing attachment style for children and adults. Young children most often are assessed using the strange situation (Ainsworth, Blehar, Waters, & Wall, 1978), while adults are

typically assessed using either self-report questionnaires (Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998; Hazan & Shaver, 1987) or with the Adult Attachment Interview (Main & Goldwyn, 1985/1991). These separate literatures will be reviewed and then commonalities and differences in their findings will be addressed.

Effect of Trauma on Children's Attachment Style

Nearly all of the studies on the effect of trauma on children's attachment styles have focused on children who have been physically or sexually abused or neglected. Several (Crittenden, 1988, 1992; Egeland & Sroufe 1981; Schneider-Rosen, Braunwald, Carlson, & Cicchetti, 1985) assessed the attachment styles of low-income children. They compared children who were abused with children who received adequate care, and found that children who were abused were more likely to be insecurely attached. Adequately cared for children were more likely to be securely attached to their caregiver. This appears to demonstrate that child maltreatment, as opposed to poverty, is linked to the development of insecure attachment styles. These studies also found stability for the secure attachment style over time, while the insecure attachment styles showed more variability. Egeland and Sroufe (1981) determined that there was a trend from an insecure style toward the secure attachment style. Children who were assessed as having an insecure attachment style at 12-months of age were likely to be assessed as having a secure attachment style at 18-months of age.

Crittenden (1992) also studied the attachment styles of children from low-income homes, but she examined additional variables such as type of abuse, coping style, attachment style, and interaction with siblings. She found that "adequately reared children were generally securely attached to their mothers, marginally maltreated

children displayed a mixture of secure and anxious patterns," and neglected and abused children displayed a combination of insecure attachment styles (p. 336). Beeghly and Cicchetti (1994) compared maltreated and non-maltreated low-income toddlers on their ability to talk about internal states (feelings and emotions of themselves and others) as well as their attachment styles. They found that children who were maltreated and insecurely attached used fewer internal state words than other children. Securely attached children had more ability to label their affect. Like the previous studies cited, these authors found significantly greater proportions of attachment insecurity in the maltreated toddlers than the non-maltreated toddlers. The non-maltreated toddlers were found to have similar proportions of attachment security as a sample of middle-class toddlers.

Schneider-Rosen and Cicchetti (1984) also examined the effects of child maltreatment on attachment style, but they went further than the other authors and also investigated the relationship between attachment style and the development of self-recognition in infants. Significant differences were found in the proportions of infants in each of the attachment styles which were similar to the findings reported earlier: Infants who were maltreated were more likely to be categorized as having an insecure attachment style, whereas those who were adequately cared for were more likely to be categorized as having a secure attachment style.

The authors found that a higher proportion of those infants who displayed visual self-recognition were securely attached, regardless of whether or not they were maltreated. Schneider-Rosen and Cicchetti (1984) suggest that the relationship between the secure attachment style and the development of the capacity for self-recognition may

be explained as follows: The quality of the attachment relationship promotes the emergence of the capacities that underlie the ability to differentiate between self and other as well as a rudimentary sense of self. This ability is evidenced by the self-recognition task. This finding appears related to Beeghly and Cichetti's (1994) data on the relationship between the ability to describe internal states and security of attachment.

Holmberg, Benedict, and Hynan (1998) examined the influence of gender, attachment disturbance, and attachment disturbance combined with exposure to violence on children's play. They reviewed casenotes of play therapy sessions of 3-5 year-olds with disrupted attachments and compared the themes of the children. They found that children with a history of both attachment disturbance and exposure to violence engaged in higher proportions of play with themes characterized as aggressive, failed nurturing, instability, and ambivalence than children with a history of disrupted attachment alone.

Lynch and Cicchetti (1998) examined the role of attachment on children's memory, comparing children who were victims of community violence, children who were abused, and a control group. The children ranged in age from 8-13 years old, and all were economically disadvantaged. The authors used the Relatedness Questionnaire, which rates children on the dimensions of emotional quality of the relationship with the primary caregiver and psychological proximity seeking to the caregiver. They found that securely attached children who had been maltreated by their parents were more able to recall negative mother-referent stimuli than insecurely attached maltreated children. However, insecurely attached children who were victims of community violence had better recall of negative mother-referent stimuli than securely attached children who had

been victims of community violence. The authors also found that children who reported high levels of community violence were more likely to be insecurely attached.

Toth and Cicchetti (1996) compared the attachment patterns of maltreated and non-maltreated low-income latency-age children. Sexually abused children with "confused patterns of relatedness" (similar to insecure attachment) reported the highest level of depressed symptomatology. In this study, a confused pattern was determined to be when the child reported high levels of satisfaction with the other (mother, teacher or best friend), as well as high levels of wishing to be closer to that person. The authors examined the impact of attachment on school functioning by comparing the attachment styles and school functioning of maltreated and non-maltreated children from low-income families. The authors found that "non-maltreated children with optimal/adequate relatedness to mother evidenced the lowest level of externalizing symptomatology." (p. 257). These children also had the highest level of social acceptance.

van IJzendoorn, Goldberg, Kroonenberg, and Frenkel (1992) conducted a meta-analysis of studies on the effect of maternal and child problems on the child's attachment as measured by the strange situation. They concluded that the presence of maternal problems (e.g., depression, mental illness, being a teenage mother) was strongly associated with children with insecure attachment styles, but the presence of child problems (e.g. prematurity, deafness, cystic fibrosis) was not. The exception was children with Down's Syndrome, who were more likely to have a "disorganized" attachment style.

Children's environments play a large role in the development of their attachment style. The literature thus far provides clear evidence that traumatized children are more

likely than non-traumatized children to have insecure attachment styles (Beeghly & Cicchetti, 1994; Crittenden, 1988, 1992; Egeland & Sroufe, 1981; Groze & Rosenthal, 1993; Holmberg, Benedict, & Hynan, 1998; Lynch & Cicchetti, 1998; Schneider-Rosen & Cicchetti, 1984; Schneider-Rosen, Braunwald, Carlson, & Cicchetti, 1985; Smith & Howard, 1994; Toth & Cicchetti, 1996). These findings have held for infants and toddlers, preschool, and latency age children, with attachment style assessed using diverse methodologies. Maternal difficulties are clearly linked to children's attachment styles (van IJzendoorn, Goldberg, Kroonenberg, & Frenkel, 1992).

The literature on trauma-related correlates of attachment style appears to focus on infancy, provide some information on the preschool and latency age, and then jumps to adulthood. Information on the effects of either early or current trauma on later childhood or adolescence is conspicuously absent in the attachment literature.

Effect of Trauma on Adults' Attachment Style

Studies of the impact of trauma on adult functioning have examined a much broader array of situations than those studies focusing on children. These studies include those on survivors of childhood sexual abuse, other childhood abuse, parental drinking, and war trauma. Taken together, they provide evidence that childhood traumas are related to enduring attachment insecurity, and that traumas faced in adulthood are also associated with insecure attachments.

Adult attachment has been assessed through a variety of self-report instruments (e.g., Bartholomew & Horowitz, 1991; Collins & Read, 1990; Hazan & Shaver, 1987; Simpson, Rholes, & Nelligan, 1992) as well as through narrative interviews (AAI; George, Kaplan, & Main, 1985). The Adult Attachment Interview (AAI) was developed

specifically to determine if infants' attachment classifications could be predicted from their parents' attachment interviews. The AAI process asks parents about their early family relationships. The interviews are transcribed and coded based on both the nature of the memories revealed and the coherence of the discussion around them. Interviewees are then classified as "secure/autonomous", "dismissing", "preoccupied", or "unresolved/disorganized" - corresponding with the categories of "secure", "avoidant", "resistant", and "disorganized" for infants assessed through the strange situation. The unresolved/disorganized classification is particularly relevant for this study, as it is assigned when "substantial lapses in the monitoring of reasoning or discourse occur during discussions of potentially traumatic events." (Hesse, 1999, p. 398).

Two studies have examined the effect of childhood sexual abuse on adult women. Stalker and Davies (1995) studied psychotherapy clients who had been sexually abused as children. They found that 60% of the participants were classified as "unresolved in respect to loss/trauma" as adults using the Adult Attachment Interview (AAI, George, Kaplan, & Main, 1985). Alexander (1993) also examined childhood sexual abuse from an attachment perspective. She recruited a community sample of women who had survived incestuous abuse. She found much higher proportions of insecure attachment styles in this sample than in a normative sample. Personality disorders, as assessed by the Millon Clinical Multiaxial Inventory-II (MCMI-II, Millon, 1969, 1981, 1986a, 1986b), were not predicted by abuse characteristics (age of onset, type, etc.) but were predicted by adult attachment style. These studies provide evidence that childhood trauma, specifically childhood sexual abuse, is associated with long-term attachment insecurity. It is notable that more than half of the women in the Stalker and Davies study

were categorized as “unresolved with respect to trauma” – years after the trauma occurred. This supports the assumption in the present study that many Holocaust survivors would be likely to be classified as “unresolved” with respect to the loss and trauma experienced in the Holocaust.

A study by Allen, Coyne, and Huntoon (1998) assessed attachment style and trauma history in women hospitalized for trauma-related disorders. They found an inverse correlation between trauma and security of attachment, so that those women with the least trauma were most likely to be securely attached. They also administered the MCMI-III to these women in order to assess personality disorders. “Fearful” attachment was associated with Borderline, Paranoid and Schizotypal personality disorders, while “preoccupied” attachment was specifically associated with Borderline Personality Disorder. Allen, Huntoon, and Evans (1999) further examined the relationships between attachment styles and trauma. They identified five subtypes of complex Posttraumatic Stress Disorder among women hospitalized for trauma-related disorders. They found that the “alienated” cluster, identified as the most pathological, had the lowest score on attachment security. The “alienated” and “withdrawn” clusters scored particularly low on capacity for closeness. The “adaptive” cluster demonstrated a relatively high capacity to depend on others along with relatively low anxiety about relationships. This provides further evidence for the link between severe trauma and impaired attachment security.

Other studies examined the impact of childhood physical abuse on adult attachment style. Their findings were similar to the findings for survivors of childhood sexual abuse. Clark, Shaver, and Calverly (1994) asked adults to recollect childhood abuse. They found that various types of childhood abuse were associated with a “fearful”

attachment style for women. Men were more likely to be classified with a “fearful” attachment style if they had suffered psychological abuse, while men classified as having a “dismissing” attachment style were more likely to report having witnessed their parents hitting each other. Individuals classified as having “secure” attachments received lower scores on a number of abuse items, indicating they had suffered less abuse.

Dutton (1998) also found that relative to men with other attachment styles, men with a “fearful” attachment style were more likely to have experienced childhood trauma. These men had high levels of depression, anxiety, dissociative states and sleep disturbances. A subgroup of these men became abusive in intimate relationships when their wives were unable to soothe them as they expected. They blamed their wives for their dysphoric feelings and for not making them feel better.

Several studies (Brennan, Shaver, & Tobey, 1991; Hadley, Holloway, & Mallinckrodt, 1993; Mothershead, Kivlighan, & Wynkoop, 1998) examined the impact of parental drinking on adult attachment styles, with some contradictory findings. Brennan et al. found that students categorized as “avoidant”, “anxious-ambivalent”, and “fearful” were more likely to have one or two problem-drinking parents. Hadley et al. found that family of origin conflict was associated with insecure attachment, but did not find significant differences between Adult Children of Alcoholics and Adult Children of Dysfunctional Families. Similarly, Mothershead et al. found family dysfunction to be related to parental attachment, but attachment was not related to parental alcoholism. Insecure attachments to parents were associated with increased levels of interpersonal distress. There appears to be inconclusive evidence for the role of parental drinking on

adult attachment style, with stronger support for the relationship between general dysfunctional family of origin and insecure attachment.

A particularly well-designed longitudinal study by Ogawa, Sroufe, Weinfield, Carlson, and Egeland (1997) studied participants prospectively, from infancy through young adulthood. They found that children who were classified as having anxious/avoidant relationships with their mothers as assessed by the strange situation in infancy were more likely to have high dissociation scores in grade school and adolescence. Those children who were classified as disorganized were likely to have high dissociation scores in adolescence and young adulthood. The connection between an early avoidant style and later dissociation is explained as resulting from the child learning early to defensively exclude information and feelings that may activate the attachment system. This may also be related to the study cited earlier (Beeghly & Cicchetti, 1994) which found that insecurely attached children used fewer internal state and feeling words.

The studies just reviewed provide evidence of the relationship between the experience of trauma and the development of an insecure style of attachment. They indicate that early traumatic experiences can lead to later classification as “unresolved with respect to loss or trauma.” The next studies provide evidence that individuals with an insecure style of attachment, *particularly those with an unresolved loss or trauma*, are more likely to have children classified as having an insecure attachment style. This evidence provides support for the hypothesis that Holocaust survivors with unresolved trauma are more likely to have children with insecure attachment styles.

Intergenerational Transmission of Attachment Style

Bowlby (1988) wrote of the effects of an individual's traumatic childhood on that person's offspring. He noted that children of traumatized parents may be required to always "appear happy and to avoid any expression of sorrow, loneliness and anger." (p. 108). The children learn to alter their perceptions in order to not experience the disallowed emotions. This leads to a variety of cognitive disturbances. The parent in this case is not functioning as a secure base from which the child can explore the world, thus it seems likely that these children develop insecure attachment styles.

Numerous studies provide evidence of the strong relationship between the attachment styles of children and their primary caregiver. Several (Ainsworth & Eichberg, 1991; Benoit & Parker, 1994; Grossmann, Fremmer-Bombik, Rudolph, & Grossmann, 1988; Main and Hesse, 1990; and Zeanah, Benoit, Barton, Regan, Hirshberg, & Lipsitt, 1993) compared the attachment styles of mothers and their infants. Main and Solomon (1986) created the "disorganized" classification for infants when researchers repeatedly found that many infants did not fit any of the three existing attachment classifications in the strange situation. The disorganized infants seemed to lack a readily observable goal in their behavior, and they often displayed odd, contradictory behavior. Some researchers have hypothesized that the disorganized infants are afraid of their attachment figure (Ward & Carlson, 1995).

Main and Hesse (1990) described a study in which the mothers' attachment classification was compared with her infants' attachment classification. In this study, they specifically studied infants who were classified as "disorganized" and their mothers. They found that 60% of mothers who had experienced early loss of a family member had

infants classified as "disorganized." Ninety-one percent of mothers classified as "unresolved with respect to loss" had infants classified as "disorganized." The authors speculated as to the source of this transmission: "Owing to the fact that what is producing fear in the parent is attachment-related, the infant may occasionally become confused in the parents' mind either with the parent herself or with those attachment figures whose death or behavior caused the original trauma." (p. 177). To extrapolate to the present study, it could be that Holocaust survivor parents confuse their children with their family members lost in the Holocaust. This constant reminder leads them to be constantly anxious and afraid, creating insecure attachments in their children.

Ainsworth and Eichberg (1991) replicated the results of Main and Hesse (1990). They studied 30 women who had experienced the death of an attachment figure. Of the 20 who were judged to have resolved their mourning, 18 infants matched their mother's attachment classifications. All of the mothers who were classified as "unresolved" with respect to loss or trauma had infants classified as "disorganized." These studies are highly relevant to the present study as it is presumed that many Holocaust survivors may have unresolved loss or trauma. If true, then extrapolating from these studies, their children would be more likely to manifest a "disorganized" attachment style relative to the children of survivors who have resolved their trauma experience.

Schuengel, van IJzendoorn, Bakermans-Kranenburg, and Blom (1998) investigated the relationship between maternal unresolved loss and frightening behavior. Frightening behavior included maternal "looming" – (suddenly appearing before the baby), or attacking the baby in words or posture. They found a relationship between mothers classified as "unresolved with respect to loss" using the AAI and frightening

behaviors observed in a naturalistic setting. Interestingly, they found a significant relationship between maternal classification as “unresolved with respect to loss” and infant “disorganized” classification, but did not find a relationship between infant classification and maternal frightening behaviors. This suggests that it is not necessarily the frightening maternal behaviors that are causing the infants’ disorganization, but some other aspect of the mother’s unresolved loss.

Bakermans-Kranenburg, Schuengel, & van IJzendoorn (1999) developed an addition to the AAI, assessing for resolution of loss due to miscarriage. They found that for insecurely attached mothers, unresolved loss due to miscarriage was related to a disorganized attachment style in their infants. In contrast, when securely attached mothers had an unresolved miscarriage, this was not related to their infants’ attachment organization. They suggested that parental attachment security can buffer the effects of trauma being transmitted to the next generation.

Grossmann, Fremmer-Bombik, Rudolph, & Grossmann (1988) found positive maternal attachment to be closely related to infant secure attachment style, while maternal repressive and incoherent patterns were related to insecure attachment styles in their infants. Zeanah et al. (1993) compared the attachment classifications of mothers and their one-year-old infants. They found significant concordance between maternal autonomous/infant secure styles and maternal dismissing/infant avoidant styles. The relationship between maternal preoccupied/infant resistant styles was not significant.

Steele, Steele and Fonagy (1993) investigated the relationships between the attachment styles of mothers and fathers with their infants. They found significant relationships between both mothers’ and fathers’ attachment styles and the attachment

classifications of their infants. More specifically, they found that mothers and fathers classified as “secure” or “avoidant” were likely to have infants classified the same way. Mothers who were classified as “unresolved with respect to loss or trauma” were likely to have infants classified as “disorganized” - however this was not true for fathers. The “preoccupied” category for parents did not have significant concordance with the insecure-resistant category for infants. The authors indicated that children’s attachment to mothers and fathers may be predictive of different areas of functioning, and cite other studies (Suess, Grossmann, & Sroufe, 1992; van IJzendoorn, Bakermans-Kranenburg, Zwart-Woudstra, Van Busschbach, & Lambermom, 1991) which suggest that attachment to mother may predict children’s concentration and ego resilience, while attachment to father is more predictive of sociability with peers.

Ward and Carlson (1995) examined the concordance of maternal and infant attachment in a sample of expectant teenage mothers. The attachment style of the mother was assessed while she was expecting, and the infants were then assessed when they were 15-months old. They found strong relationships between infant and mother attachment style.

Oppenheim (1998) reviewed research on the effect of collective sleeping on children’s attachment styles as well as the transmission of attachment styles in the Israeli kibbutz. Until just recently, infants and children living in the Israeli kibbutzim spent the night in an infant or children’s house, where they were cared for by a rotating watchwoman. Using the strange situation, children who were raised in collective sleeping arrangements were classified with significantly higher levels of insecure attachment than other Israeli samples. When the kibbutzim began shifting away from the

collective sleeping arrangement, some investigators compared the attachment styles of children living on kibbutzim with and without such arrangements (Sagi, van IJzendoorn, Aviezer, Donnel, and Mayseless, 1994). They found that 52% of the children from collective sleeping arrangements were classified as insecurely attached, compared to 20% of the children who spent the night with their families. The groups were reported to be identical except for the sleeping arrangements. Another group (Sagi et al., 1997) then compared the intergenerational transmission of attachment between children and caregivers on kibbutzim with and without collective sleeping arrangements. They found a 40% concordance in the attachment styles of children and caregivers on kibbutzim with collective sleeping, compared to 76% concordance between children and caregivers who were sleeping together. These studies indicated that the practice of collective sleeping resulted in higher proportions of insecure attachment styles in children and disrupted the transmission of attachment from caregivers to children.

Two studies (Benoit & Parker, 1994; Soares & Silva, 1998) examined the correlation of attachment style between a parent and their older offspring. Benoit and Parker compared the attachment styles of grandmothers, mothers and infants. They found significant correlations between expectant mothers with their own mothers when the three-category classification system of the Adult Attachment Interview was used. Mother-infant attachment style concordance was examined both prospectively and concurrently. Significant mother-infant attachment style concordance was found using both prospective and concurrent assessment, and by using the three vs. four category classification system. Interestingly, there was no significant relationship between grandmother's "unresolved" attachment status and the mother's attachment style. This is

different than what would be predicted from the literature on "unresolved" mothers and infants, and may possibly be explained by the "unresolved" loss coming at a time when the childrearing was basically completed. Alternatively, it may be that the unresolved status of mothers has a disorganizing effect on infants, but that children learn to compensate as they grow older. The present study will help clarify this by assessing the adult children's attachment style after they have been raised by a parent with unresolved trauma.

Soares and Silva (1998) compared the attachment styles of parents and their adolescent offspring. They used the Adult Attachment Interview with 60 adolescents and their mothers. They found a 72% match between the attachment classifications of adolescents and their mothers. The concordance appeared to be stronger for mothers and daughters and for mothers from a "middle" education level (completed high school, no college). None of the adolescents were classified as secure-reflexive, which means that they were not able to describe negative attachment experiences in a coherent, balanced way. The authors suggested that this may be due to the fact that the adolescents were still living with and to some degree enmeshed with their attachment figures.

van IJzendoorn (1992) conducted a review of the literature on the intergenerational transmission of attachment styles. He reviewed several studies that compared the attachment styles of parents and their infants and noted strong correlations between infant and parent attachment style, even with large time gaps between child and parent assessment. Later, the same author conducted a meta-analysis of empirical studies assessing the concordance of parental and infant attachment (van IJzendoorn, 1995). The meta-analysis also revealed strong correlations between parent and infant attachment,

with maternal attachment more strongly related to infant attachment than paternal attachment. Samples with older children were less strongly correlated than studies with younger children. Random samples and samples from the United States showed larger effect sizes than selected samples and those from other countries. He found that adult attachment was predictive of infant attachment using the four-category model, and not just the secure/insecure split. van IJzendoorn and Bakermans-Kranenburg (1997) also conducted a meta-analysis of the relationship between parental attachment representations and maternal sensitive responsiveness. They found a moderate effect size for this relationship ($r=.34$).

The studies just reviewed provide strong evidence for the intergenerational transmission of attachment style. Concordant attachment styles have primarily been found between mothers and their infants, but have also been found between fathers and their infants, grandmothers and their daughters, and mothers and their adolescents. A particularly strong relationship has been noted between a mother's "unresolved" classification and her child's classification as "disorganized." The next section will review the literature on vicarious traumatization, which may shed light on the effects of being a witness to another's trauma.

Traumatization

McCann, Sakheim, and Abrahamson (1988) provided a comprehensive review of the research and theory of traumatization, and proposed an explanatory model of adaptation. The authors suggested that traumatized individuals may show psychological responses across five major categories: emotional, cognitive, biological, behavioral, and interpersonal. They indicate that fear, anxiety, depression and decreased self-esteem are

universal immediate reactions to trauma or victimization, although the evidence for long-term effects appears to depend on the type of trauma.

Although the McCann et al review is generally quite comprehensive, it is criticized by Figley (1988) for not including the Nazi Holocaust in its consideration of the literature on trauma and victimization. He also cited the need for inclusion of secondary traumatization of those who work with trauma victims as well as the family members of trauma victims in a review of the literature. He suggested focusing on traumatic stress rather than on victimization, noting that victims hate to be referred to as victims, and finally he notes the importance of “*studying non-help seeking people* who have been exposed to traumatic events.” (p. 639). The present study attempted to incorporate Figley’s recommendations. It utilized non-help seeking participants who were children of Holocaust survivors and it addresses the need for inclusion of secondary traumatization.

Brett and Ostruff (1985) conducted another review of trauma literature. They reviewed the ways traumatic imagery has been conceptualized by a number of authors over the years. They abstracted two dimensions of symptoms that were identified by previous work: repetition of the trauma and attempts to deny the trauma. These dimensions are hypothesized to be related, so that one cluster of symptoms leads to the other in a continuing cycle. They also noted that different types of trauma appear to be related to different types of symptoms, so that those exposed to combat are more likely to experience intrusive imagery while those who committed atrocities are more prone to psychic numbing. The repetition and attempts to deny the trauma appear to be related to

the earlier described tendency for Holocaust survivors to either speak compulsively of their experiences or not at all.

Vicarious Traumatization

Numerous authors have written on the experience of vicarious traumatization, defined as "the effects which clients' graphic and painful material (e.g., rape, abuse, violent ideation) produces in the therapist's own cognitive schemas or beliefs, expectations, and assumptions about self and others". (Fox & Carey, 1999, p.189). If this definition is extended to children exposed to their parents' trauma, it seems clear that that this vicarious traumatization would affect their cognitive schemas (mental models) and thereby their attachment styles.

Baranowsky, Young, Johnson-Douglas, Williams-Keeler, & McCarrey (1998) noted a particularly interesting study (McCarroll, Blank, & Hill, 1995) which found that staff at the United States Holocaust Museum suffered stress reactions from exposure to historical material on the Holocaust. This lends support to the expansion of the term vicarious traumatization from therapists to others exposed to traumatic material. Certainly it seems likely that if therapists and museum staff members, exposed to trauma on a relatively limited basis, develop vicarious traumatization, then children of Holocaust survivors, potentially exposed vicariously to parental traumatic material on a daily basis, would also experience symptomatology.

The studies reviewed in this section provide evidence that individuals exposed to a variety of types of trauma are likely to experience a range of symptoms from the trauma, and these symptoms may be quite long lasting. These studies establish the impact of trauma on the individual and note that many traumatized individuals do not

seek help for their symptoms. The next set of studies reviews the literature on the children of traumatized individuals.

Intergenerational Effects of Trauma

A number of authors have examined the intergenerational effects of various types of trauma (Aarts, 1998, Baker & Gippenreiter, 1998; Hunter-King, 1998; Nader, 1998; Nagata, 1998; & Rosenheck & Fontana, 1998).

Nader (1998) reported that children who experienced trauma were more likely to develop symptoms of Post-traumatic stress disorder (PTSD) if their parents had previously experienced a trauma. The child's trauma did not tend to be similar to the parents'. She summarized a number of possible explanations for this increased likelihood of traumatic symptoms: heightened vulnerability in children of traumatized parents, learned responses from parents, possible undermining of recovery by overprotective survivor parents, interpretation of the event as a second trauma - with the first identified as the parents' traumatization, or a sense of themselves as protectors of their parents. (p. 581). She also noted the possibility of genetic imprinting as a way that trauma is transmitted across generations. Nader also reported that parents who had worked to resolve their traumas, or who had served an active role in protecting themselves during their trauma, were less likely to have children develop PTSD symptoms after a traumatic event. This study provides evidence that parents' resolution of trauma is associated with healthier outcomes for their offspring.

Other authors focused on children whose parents were affected by war or political persecution. The intergenerational effects of the Japanese-American internment were described by Nagata (1998). She studied 596 Japanese-Americans, and compared those

whose had one or two parents interned with those who did not have a parent interned. She found that those with at least one parent interned had more frequent and longer conversations with their parents about the internment, although these conversations were still described as few and brief.

Rosenheck and Fontana (1998) examined the intergenerational aspects of trauma with relation to Vietnam combat veterans. They reviewed two studies of Vietnam veterans with and without fathers who were veterans. One study assessed a general sample of Vietnam veterans, while the other assessed a sample that was seeking help at the Department for Veterans' Affairs. In the general sample, there were no significant differences between those veterans with veteran fathers and those whose fathers were not veterans. However, in the help-seeking sample, those Vietnam veterans with PTSD had more severe symptoms if their fathers were also veterans. This research is very similar to research on children of Holocaust survivors (COS), which has found few differences between COS and controls in a general sample, but more evidence of pathology for children of survivors when examining clinical samples.

Baker and Gippenreiter (1998) examined the impact of Stalin's purge on succeeding generations of Russian families. The authors found that grandchildren's experience of emotional cutoff (Bowen, 1978) from their grandparents was not related to whether the grandparents had gone through the Purge. Cutoff is defined as "part of the natural process in which children move toward autonomy in relation to their parents." (p. 409). Mild cutoff can be healthy, but intense emotional cutoff "can be said to be pathogenic." (p. 409). There was less cutoff in the maternal line than in the paternal line. The authors concluded that families who maintained a sense of connectedness with lost

family members fared better than those who did not, and this remained true through the next generation. They noted, “Whether the grandparents actually physically survived the Purge was less important than the strength and values passed on to their grandchildren through the knowledge of what had happened to them.” (p. 422). This suggests that those parents who talk about the Holocaust and their losses may have more emotionally healthy offspring than those who do not.

Similar conclusions were made by Hunter-King (1998), who studied children of soldiers who were Missing in Action/Bodies Not Recovered in Vietnam. She found that the most difficult problem for these adult children was the lack of resolution of their loss. Resolution of loss appears to affect individuals from childhood into adulthood. The majority also reported a positive effect in that they developed closer relationships with their remaining family members than they believed they would have otherwise. Hunter-King found that the role of the mother was the most critical factor in the children’s coping with their loss. Since this seemed to be the key predictor of their children’s coping, she advocated for supporting the families immediately upon their loss in order to prevent the intergenerational effects of unresolved trauma.

Aarts (1998) reviewed studies of children of World War II survivors from the Dutch East Indies. In one study, 6 psychotherapists were interviewed about their experiences in working with this population. All six concurred that children of parents who were not able to master their war-related traumas were at higher risk of developing psychopathological complaints themselves. These therapists said that parents who had gone through this trauma engaged in a “conspiracy of silence” which among other things led to a dys-regulation of attachment. All six therapists concurred that these children of

survivors were more difficult to treat than their other patients due to rigid defense mechanisms and intense loyalty to their parents. Another study reviewed by Aarts was an empirical study comparing children of World War II survivors from the Dutch Indies with a matched comparison group. Very few significant differences were found between the two groups. Children whose parents had been imprisoned in Japanese internment camps had more often sought professional help in the past. There were no differences in current nature or number of psychological complaints. Again, this parallels the literature on children of Holocaust survivors, with an emphasis on psychopathology when clinical populations are studied and few differences between COS and control groups when non-clinical populations are studied.

There is some evidence from the literature on the intergenerational transmission of trauma that children of survivors of trauma are at some increased risk of symptomatology themselves. Communication about the trauma and resolution of losses are associated with healthier offspring.

Children of Holocaust Survivors

There is a great deal of literature published on children of Holocaust survivors. The current state of literature includes empirical studies, autobiographical accounts from children of survivors, theoretical papers by therapists, and works of fiction. Given the empirical nature of the proposed study, the empirical studies of children of Holocaust survivors, published between the years 1992-2002 and published literature reviews were reviewed for this section. The majority of these studies compared a group of children of Holocaust survivors to some control group on a measure of personality, adjustment or family functioning.

Rieck (1994) conducted an epidemiological study of all of the children referred for psychological services in a community in Israel. She gathered data on only children or first-born children in an attempt to control for birth-order. Rieck found that when children's fathers were less educated, survivor's children were referred less frequently than controls. Male children of survivors were referred more often than female children of survivors, and female children of survivors were referred less frequently than female controls.

Schwartz, Dohrenwend, and Levav (1994) conducted a two-stage epidemiological study using a random sample of the Israel Population Registry. They compared children of survivors to children of immigrants on a wide variety of measures assessing participants' current functioning. They found no differences between the groups on demoralization, enervation, post-traumatic stress symptoms, or guilt. They also found no differences between the groups on false beliefs and perceptions, suicidal ideation, antisocial behaviors, problems with drinking, or schizoid personality traits. However, children of survivors did demonstrate a greater need to please and higher scores on over-conformity. In the second phase of the study, participants were asked about their current and lifetime rates of major and minor depression and anxiety disorders. There were no differences between the groups on the current rates of these disorders, but the children of survivors (COS) were elevated in the lifetime rates. The authors speculated that the COS may have felt more anxious and depressed when they were younger and living with their survivor parents. Alternatively, they may have made more self-attributions of anxiety and depression when reflecting back on their earlier lives with their survivor parents.

Baron, Reznikoff, and Glenwick (1993) compared children of survivors with a control group on a variety of personality measures. To control for the effect of being a child of immigrants, all of the participants were Jewish children of European immigrants. The authors found no significant differences between the two groups. Magids (1998) also compared children of survivors with a control group. She compared adult children of “hidden” Holocaust survivors, who survived the Holocaust by hiding – in a closed space, in the woods, or by posing as or converting to Christianity to a control group of adult participants. The control group was matched on a number of demographic variables, including age, gender, religion, and European ancestry. Both groups completed the 16PF, and no significant differences were found between them.

Mazor and Tal (1996) also compared children of survivors to children of immigrants, although in contrast to Baron et al’s American sample, Mazor and Tal’s was Israeli. They compared the participants’ ability to individuate from their family of origin and develop the capacity for intimacy in spousal relationships. Mazor and Tal concluded that children of survivors showed more emotional dependence on their parents and exhibited a lower capacity for intimacy with their spouses than the control group. Their study will be partially replicated in the present study, by utilizing the same measure of emotional dependence/psychological interconnectedness. However, the present study will test the relationships between psychological interconnectedness, perceptions of resolution of parents’ trauma, and attachment security.

A related study was conducted by Brom, Kfir, and Dasberg (2001). They compared children of Holocaust survivors with a control group in a double-blind interview designed to assess psychopathology and difficulties in interpersonal

relationships. They developed an instrument for their study that assessed separation/individuation, aggression regulation, guilt feelings, cohesiveness of identity formation, vulnerability of the self, depression and interpersonal problems. They found that the children of survivors did not exhibit any more symptoms of psychopathology than the control group. However, the children of survivors (all female participants) did demonstrate greater difficulty with separation-individuation in their relationships with their partners and children, they were more guilt-prone, and appeared more narcissistically vulnerable than the participants in the control group. No differences were found in the regulation of aggression, cohesiveness of identity, depression, or interpersonal behavior.

Sorscher and Cohen (1997) compared American adult children of survivors with American adult Jews who were not children of survivors. These authors designated levels of trauma for the survivors depending on how they had spent the Holocaust - level 1 survivors were refugees, and level 4 survivors were incarcerated in concentration or forced labor camps. They examined participants' Jewish identification, Holocaust-related imagery, and parental communication of wartime experiences. They found no differences between the groups on levels of Jewish identity, but did find that level of maternal trauma was significantly correlated with affective and negative communication. Level of paternal trauma was not associated with a particular communication style. The authors also found that children of survivors reported significantly greater Holocaust-imagery, particularly in associated dreams, thoughts and places.

Solomon (1995) examined the question of whether being a child of Holocaust survivors in Israel made soldiers who were captured and held as Prisoners of War

(POWs) more vulnerable to Post-traumatic Stress Disorder (PTSD) than other POWs who were not children of survivors. He found that parental Holocaust status was not a predictor of soldiers' development of PTSD symptoms after being captured.

Yehuda (1999) extended Solomon's work with a series of three studies. In the first, she compared current and lifetime PTSD and other psychiatric disorders in children of Holocaust survivors and a control group. She found no differences between the groups in the number of traumatic events experienced. However, children of survivors were significantly more likely to meet criteria for current and lifetime PTSD, as well as for other current and lifetime psychiatric disorders. This seems related to the earlier study reviewed by Rosenheck and Fontana (1998), which found that help-seeking Vietnam veterans with PTSD had more severe symptoms if their fathers were also veterans. The description of the earlier study by Schwartz, Dohrenwend, and Levav (1994), also found that children of traumatized parents had higher lifetime rates depression and anxiety. All of these studies support the contention that children of traumatized parents are more vulnerable to PTSD and other difficulties.

The second study compared the rates of PTSD for Holocaust survivors and their adult offspring in a community sample. Yehuda found significant correlations between parents' and children's PTSD symptoms. (She had similar findings in an earlier study, Yehuda, Schmeidler, Giller, Siever, & Binder-Brynes 1998). She noted that, "Offspring of Holocaust survivors were significantly more likely to develop PTSD in response to their own traumatic events if their parents had chronic PTSD." (p. 113). There were no differences in reported stressful events between the offspring who did and did not develop PTSD. There also did not appear to be a correlation between parents' history of

chronic PTSD and other psychiatric diagnoses in their offspring. Yehuda's final study in the series compared cortisol levels in children of Holocaust survivors and a control group. She noted that cortisol levels are typically lower in trauma survivors with PTSD, and explained that cortisol is a hormone released by the adrenal gland in times of stress. She hypothesized that the lowered cortisol levels in trauma survivors with PTSD is related to "the behavioral hyper-responsiveness of trauma survivors." (p. 116). Yehuda found that children of Holocaust survivors had lower levels of cortisol than the control group, and that those children of survivors with a history of PTSD accounted for this effect. There were no significant differences between the groups on trauma exposure. A related study (Yehuda, Schneidler, Elkin et al., 1998) found no significant differences in levels of cortisol excretion between Holocaust survivors and offspring of Holocaust survivors, suggesting they are equally hyper-responsive. Yehuda et al. also found that offspring of Holocaust survivors were more likely to endorse PTSD symptoms on self-report measures than a control group. When children of Holocaust survivors identified their parents' Holocaust experience as their own major traumatic event, these offspring had lower cortisol levels and more PTSD symptoms than offspring who identified another experience as their greatest trauma.

Yehuda, Schneidler, Wainberg, Binder-Brynes, and Duvdevani (1998) compared children of Holocaust survivors with a control group on past and current trauma and PTSD symptoms. They found higher levels of current and lifetime PTSD and other psychiatric disorders in children of Holocaust survivors than in the control group. Approximately 25% of the children of Holocaust survivors identified their parents' Holocaust experience as their own most distressing life event, even though there were no

items specifically asking about this event and many had experienced their own life-threatening event. The authors recruited both a clinical, help-seeking sample as well as a community sample of children of Holocaust survivors. No differences were found between these subgroups.

In an unusual study, Weissmark and Giacomo (1993) compared children of survivors with children of active members of the Nazi party during the Third Reich. They discovered that members of both groups felt they did not know all of the chronological details of their parents' wartime experiences and that their parents were extremely ambivalent about communicating those experiences. Both groups reported an overwhelming feeling of anxiety and fear in response to their parents' style of communication about their experiences. All of the participants had fantasies about their parents' wartime experiences, and were told by their parents that they could not understand those times.

All of the above studies compared children of survivors with some other group. A recent study (Yehuda, Schmeidler, Giller, Siever, & Binder-Brynes, 1998) compared children of survivors with their parents who survived the Holocaust. The authors examined post-traumatic stress symptoms and psychiatric diagnoses, and found a strong relationship between the intensity of intrusive thoughts about the Holocaust between survivors and their offspring. A similar relationship was found for the impact of trauma on the participants' lives. The majority of survivors met the criteria for PTSD either currently or in the past. Survivors who at some time met criteria for PTSD were more likely to have children who developed PTSD in response to their own life traumas. The authors indicated that groups of survivors and their children are heterogeneous, which

suggests that future research should focus on assessing the within-group variability of children of survivors.

In addition to the individual studies reviewed above, there have been numerous published reviews of the literature on children of Holocaust survivors (Baranowsky, Young, Johnson-Douglas, Williams-Keeler, and McCarrey, 1998; Dasberg, 1987; Kellermann, 2001; Last, 1988; and Solkoff, 1981, 1992). Dasberg (1987) concluded in his review that children of survivors are a vulnerable population who demonstrate more anxiety, lack psychosocial maturity, and feel that they have to be high achievers to compensate for what has been lost. One study he reviewed (Solomon, Kotler, & Mikulincer, 1988-1989) found that Israeli soldiers who were children of survivors had more difficulty recuperating from combat reactions than a control group of soldiers. (A finding which contradicts Solomon, 1995).

In stark contrast, Last (1988) reviewed several controlled studies that found no differences between children of survivors and control groups on mental health outcomes. He pointed out that earlier, uncontrolled studies tended to pathologize children of survivors. He indicated that those studies were methodologically poor and were carried out with “the premise that children of survivors must be adversely affected by their parents” (p77). Last did review some methodologically sound studies that found differences between children of survivors and controls, however, he felt that these differences were not pathological. American children of survivors were found to suppress hostile affect, and both Israeli and American children of survivors were found to be more dependent than controls.

Last also reviewed a series of studies (Last & Klein, 1981; Last & Klein, 1984a; Last & Klein, 1984b) that found that paternal traumatization was strongly related to a host of child-rearing variables by both parents for male offspring. The researchers assessed survivor traumatization on the basis of how the survivor had spent their time during the Holocaust, with concentration camp survival assumed to be the most traumatic. Male offspring indicated that maternal traumatization was related to decreased harsh control, enforcement and intrusiveness. No relationship was found for female offspring's experience of child-rearing by their mothers and maternal traumatization, but female offspring reported paternal traumatization was related to inconsistent paternal discipline. Female offspring reported their fathers refrained from harsh controlling, anxiety-provoking, or hostile expressions in child-rearing as a function of the girls' mothers' traumatization. This study also found that severity of parental traumatization was related to lower assertiveness and active coping in their adolescent offspring, with higher levels of preoccupation with nurturance, and with avoidance of inferiority. Degree of parental traumatization was not found to be related to their offspring's overall mental health. This study reinforces the suggestion by Yehuda, Schneidler, Giller, Siever, and Binder-Brynes (1998) that children of survivors are not a homogenous population, and indicates that level of parental traumatization is predictive of within-group differences. However, it should be noted that in this study, the authors, not the survivors or their offspring, determined level of trauma.

Solkoff (1981, 1992) conducted two reviews of the literature. In Solkoff (1981), most of the studies reviewed were clinical, theoretical, or anecdotal. Only four experimental studies were reviewed, and of those, three found differences between

children of survivors and controls (Aleksandrowicz, 1973; de Graaf, 1975; & Sigal, Silver, Rakoff, & Ellin, 1973). These studies found children of survivors to have more difficulties on a wide variety of adjustment outcomes. However, Solkoff concluded that each of these studies was methodologically unsound, citing post-hoc interpretations, lack of description of participants, conclusions formed without evidence, etc. The fourth study (Rustin, 1971) did not find evidence of psychopathological differences between children of survivors and controls. Solkoff concluded that Rustin's study was "one of the very few carefully controlled studies of the behavior of children of survivors" (p. 40).

A large number of empirical studies had been published between the time of Solkoff's initial review and his later one (Solkoff, 1992). Eighteen empirical studies were examined in this review. Solkoff criticized the methodology of many of these studies, but noted that the more methodologically sound studies found less evidence of pathology among children of survivors. One study (Sigal & Weinfeld, 1987) found that daughters of survivors were more likely to report paternal strictness than control females. Another study that found children of survivors to be more anxious and paranoid than a control group (Lichtman, 1984) was criticized by Solkoff for sampling biases. Several studies examined the relationship between parental trauma and childrearing practices. These studies either found no differences between children of survivors and controls or were determined by Solkoff to have significant methodological weaknesses. All of these studies determined parental trauma by an a priori rating system of how the parent had spent their time in the Holocaust. Solkoff (1981, 1992) suggested that methodologically sound research on children of Holocaust survivors should include a control group of

Jewish children of immigrants, should use sampling procedures that avoid bias, and should pilot test new instruments to establish their reliability and validity.

Baranowsky, Young, Johnson-Douglas, Williams-Keeler, and McCarey (1998) examined the literature for evidence of the transmission of symptoms of PTSD from Holocaust survivors to their children. They found support for the transmission of PTSD in the clinical and anecdotal literature. The authors noted that the empirical studies reviewed tended to find less evidence of PTSD and other psychopathology in children of survivors. However, they point out that many of the empirical studies are flawed in their methodology. In particular, the role of immigrant status versus survivor status as an explanatory variable has not been fully explored.

Kellermann (2001) reviewed 35 studies of children of Holocaust survivors that required matched assignments of participants to experimental and control groups. There were few differences between children of survivors and control group participants when non-clinical populations were studied. However, when clinical populations were compared, the children of Holocaust survivors appeared to have some specific difficulties with coping with stress and a higher vulnerability to PTSD. He suggested that children of Holocaust survivors do not in general differ from the general population, but if they are faced with additional stress "their latent vulnerability will become more manifest." (p. 43).

The current study proposes to examine within-group differences and so a control group will not be utilized. Some of the studies reviewed above (Last, 1988; Yehuda, Schmeidler, Giller, Siever, and Binder-Brynes, 1998) provide some evidence of within-group differences in the population of children of Holocaust survivors. To date,

none of these studies have assessed parental traumatization from the perspective of the child of the Holocaust survivor. The current study follows some of the recommendations of Solkoff (1981, 1992), including the use of sampling procedures that avoid bias and pilot testing a new instrument to establish its reliability and validity. Also, since individuals' attachment classifications are based on their perceptions of relationships, it will be important to determine if perceptions of parental traumatization are predictive of current adult attachment organization.

Attachment and the Holocaust

A literature search for studies on children of Holocaust survivors from an attachment theoretical perspective yielded only three studies. The first, by Bar-On et al. (1998) proposed that children of Holocaust survivors are anxious/ambivalently attached to their parents. The authors reviewed three studies that provide some indirect support for their proposition. The studies are a mix of case studies and empirical studies, but none set out to directly test the hypothesis that children of Holocaust survivors are insecurely attached to their parents. In the first study, a group of children of Holocaust survivors in the Netherlands was compared to a control group. During structured interviews, the children of survivors characterized their childhoods as having problems with separations. They also reported not knowing the details of their parents' Holocaust experience. In the second study, children of survivors completed questionnaires that revealed that the children of survivors were preoccupied with the pain of their parents. The final study reviewed is a case example of an outwardly successful Israeli man, who clearly had difficulty integrating the reality of his father's Holocaust experience with the father he knew as an Israeli soldier. The authors indicate that Holocaust survivors are

likely to have unresolved trauma, which is linked in the attachment literature to insecure attachment in children. However, they do not directly test this assumption.

In an anecdotal/theoretical paper, Wardi (1994) suggested that children of survivors have difficulty with separation issues as they hold the expectations of the parent to make up for all of the lost family members. Zeleznikow and Lang (1989) wrote an editorial response to an article by Quadrio and Levy (1988). In it, they claim that descriptions of families of survivors as “overattached” have unwarranted negative connotations and that considering their histories, these families’ attachment to one another are “the most healthy and human response” (p. 32).

Summary of Literature Review

The literature reviewed thus far provides strong evidence for the tenets of attachment theory and the relationship between attachment security and trauma. Children and adults who are traumatized are more likely to have insecure attachment styles. There is also evidence for the intergenerational transmission of trauma, in that high rates of concordance have been found between the attachment styles of various generations, including grandparents, their children, and their grandchildren. Notably, parents classified as “unresolved with respect to trauma or loss” appear especially likely to have children classified as insecurely attached, specifically as “disorganized.” However, it should also be noted that many people who are traumatized do not develop insecure attachment styles, and some of those who do are able to change from an insecure attachment style to a secure one (Cohn, Silver, Cowan, Cowan, & Pearson, 1992; Egeland & Sroufe, 1981). There is some evidence that given corrective emotional

experiences with an appropriate attachment figure (potentially including a therapist), individuals' mental models can change.

Individuals who have survived the Holocaust have survived one of the most significant traumas of recorded history – the deliberate genocide of a people. It is possible that some Holocaust survivors have achieved some resolution of their trauma, most likely with the help of an attachment figure. There is some evidence that Holocaust traumatization has affected the offspring of survivors, but this has not yet been examined from an attachment theoretical framework. It seems likely that the offspring who perceive their parents as having been more traumatized by the Holocaust will themselves be more likely to have an insecure attachment style.

The Pilot Study

Rationale

Currently, researchers' attempts to assess Holocaust survivor's level of traumatization consist of researcher-defined levels of traumatization. Several authors have developed traumatization scales based on how the survivor spent the Holocaust, with the assumption that those who spent it in a concentration camp would be more traumatized than those who spent it in hiding. After an extensive literature search revealed no suitable existing measure of parental traumatization from the Holocaust from the perspective of the survivor or their children, a novel measure, the Perceived Parental Holocaust Traumatization Scale was developed and validated.

Participants

This pilot study was completed with 46 adult children of Holocaust survivors to assess the reliability and validity of a self-report measure of perceived parental Holocaust

traumatization. Mailing labels from a Midwest organization of children of Holocaust survivors were obtained, and a random sample were sent consent forms and information about the study. Individuals who expressed interest were mailed a survey packet and were also asked to provide names of other potential participants.

Procedure

Once individuals were sent survey packets, they received up to two postcards to encourage them to return the surveys. Individuals who returned a completed survey were also interviewed about their experience in completing the survey. Thirty-six of the participants who completed surveys were contacted for telephone interviews, the remainder were considered not available after six unsuccessful attempts were made to reach them. The interviews suggested other variables of interest, including country of origin of the parent, level of religiosity of the adult child of a Holocaust survivor and their parent, length of time the parent was in the camp, whether the parent lost children or a spouse in the Holocaust, etc. The age of the parent during the Holocaust, whether they had lost close family members during the Holocaust, and level of religious observance were the predictors mentioned most often by the participants and those will be included in the present study.

Measures

Demographic Questionnaire. This brief instrument was developed to collect background information on the participants and their survivor parents. It asks the participants' age, their marital status, and level of education. It also has questions about where their survivor parents were born, how old they were during the Holocaust, how they spent the Holocaust, and where they went immediately following the Holocaust.

Clinical Trauma Assessment. (CTA; Ruch, Gartrell, Ramelli, & Coyne, 1991).

This is an 16-item instrument that allows an observer to rate an individual's trauma symptomatology. It was developed for clinicians to rate sexual assault victims, but the symptoms are general in nature (e.g., depression, self-blame). Each item is rated on a 0-4 Likert scale, with 0 representing the symptom being *not at all* present and 4 representing the symptom being present *extremely often*. Two copies were presented to the participants in this study, with instructions to complete one if their mother was a Holocaust survivor, the other if their father was the survivor, and both forms if both parents were survivors. Construct validity of this scale was previously assessed to be adequate by comparing CTA ratings completed by a crisis intervention worker with victim's self-reported trauma ratings on the Sexual Assault Symptom Scale (SASS, Ruch, et al., 1991). Ten items are the same across both scales, and correlations are significant for each of them. This indicates that an independent rater perceived the victim as having the same level of symptomatology as the victim herself. In the pilot study, a Cronbach's alpha coefficient of $r = .86$ was achieved for the CTA version for fathers, and $r = .89$ for mothers.

Communication Questionnaire. (CQ; Lichtman, 1984) This is a 19-item self-report measure of the communication between Holocaust survivors and their offspring, as assessed from the perspective of the offspring. The Communication Questionnaire contains six factor-analytically derived subscales:

1. COM 1-Mother's frequent and willing discussion of her wartime experiences and the transmission of factual information. [Sample item: How often have you and

- your mother discussed her experiences during the war? a) practically/actually never b) rarely c) from time to time d) frequently e) persistently].
2. COM 2-Guilt-inducing communication by either parent. [Sample item: How often have you heard statements akin to this one from your father “For this I survived Auschwitz/Hitler!” in response to something you do (did) which upsets him? a) practically/actually never b) rarely c) occasionally d) frequently e) usually].
 3. COM 3-Father’s frequent and willing discussion of his wartime experience and the transmission of factual information. [Sample item: How often have you and your father discussed his experiences during the War? a) practically/actually never b) rarely c) from time to time d) frequently e) persistently].
 4. COM 4-Awareness of the Holocaust at a young age and its nonverbal presence in the home, as conveyed by either parent. [Sample item: At what age, do you recall having first heard about your parents’ Holocaust experiences? a) around the time I was in high school b) sometime in jr. high c) in elementary school d) before I started school e) I somehow always knew about it].
 5. COM 5-Indirect communication about the Holocaust, as conveyed by both mother and father. [Sample item: How often were Holocaust experiences discussed when your parents got together with friends or relatives, and you were within earshot? a) practically/actually never b) rarely c) occasionally d) frequently e) usually].
 6. COM 6-Affective communication about the Holocaust, as conveyed by both mother and father. [Sample item: When my father spoke of his Holocaust

experiences he would usually: a) make light of it/stress the comical or heroic aspects b) speak of it in a matter of fact way c) sound very sad or angry d) be on the verge of tears e) cry].

The author of this measure (Lichtman, 1984) found that a high degree of guilt-inducing, indirect and affective communication was engaged in most frequently by parents who had undergone the greatest trauma (as rated by their offspring) and by mothers who had suffered the greatest loss of immediate family members. For male offspring, mothers' frequent and willing discussion of the Holocaust was related to the degree of trauma undergone by mothers. Communication that was conveyed at an early age for the offspring was related to a very high degree of trauma for parents, and these parents tended to have fewer children. A later study (Keller, 1988) found that guilt-inducing communication was related to chaotic, rigid, disengaged and enmeshed family styles in comparison to more balanced, healthy family styles. Keller also found that guilt-inducing, affective, and early non-verbal communication was inversely correlated with family satisfaction, adaptability, and cohesion, particularly for females. Keller also found that "Fathers' open communication facilitated increased family cohesiveness, while guilt-inducing and nonverbal communication decreased it." (p. 230). Older respondents were also more likely to report that their parents engaged in indirect communication about the Holocaust. Sorscher and Cohen (1997) found that maternal trauma (as rated by the authors) was significantly correlated with affective and negative communication. They reported an alpha coefficient of .83 for the total scale. In the pilot study, an alpha coefficient of .83 was obtained for COM1, .70 for COM2, .65 for COM3, .42 for COM4,

.44 for COM5, and .21 for COM6. An alpha coefficient of .71 was obtained for the total scale.

Bem Sex Role Inventory. (BSRI; Bem, 1974) This is a 60-item self-report instrument that assesses individuals' sex roles. Participants are directed to rate the degree to which each of 60 adjectives describes them on a scale of 1-7 (1=never or almost never true, 7=always or almost always true). Individuals who score highly on the feminine adjectives but not the masculine are characterized as "feminine." Those who score highly on the masculine adjectives but not the feminine are characterized as "masculine." Individuals who score highly on both masculine and feminine traits are characterized as "androgynous." "Acts as a leader" is an example of a "masculine" adjective and "affectionate" is an example of a "feminine" adjective on the list. The "masculinity" and "femininity" scales have high reported internal consistency, $r = .86$ and $r = .80$ respectively (Bem, 1974). One-month test-retest reliability is reported as $r = .90$ for "masculinity", $r = .90$ for "femininity", and $r = .89$ for "androgyny." (Bem, 1974). The BSRI was shown to have discriminant validity based on low to modest correlations with two other measures of sex role (Bem, 1974).

The Internal/External Locus of Control Scale. (IE Scale; Rotter, 1966). This is a 29-item self-report measure of beliefs about locus of control. Participants are directed to pick which of two statements most closely characterizes their beliefs. A sample item is: "a) Children get into trouble because their parents punish them too much. b) The trouble with most children nowadays is that their parents are too easy with them." The internal consistency, test-retest reliability and discriminant validity have been well-established (Cardi, 1962; Franklin, 1963; Ladwig, 1963; and Strickland, 1962). Internal

consistency has been reported in various studies as ranging from $r = .65$ to $r = .79$, test-retest reliability from $r = .49$ (one-month) to $r = .83$ (two months), and correlation with intellectual measures from $r = .03$ to $r = -.22$. (Rotter, 1966).

The Perceived Parental Holocaust Traumatization Scale. (PPHTS; Berger & Lopez, 1999). This is the instrument developed for this study. It contains 27 items rated from 1 (very false) to 5 (very true). Items were initially generated after reviewing the literature. Children of Holocaust survivors assessed the face validity of the items. It is completed separately for mothers and fathers. A sample item is "My mother had difficulty talking about the Holocaust." Adequate internal reliability, convergent validity and discriminant validity was obtained in this pilot study. More specific details may be found in the results section.

Results

The participants in this study had a mean age of 42 years, had received an average of 17 years of formal education, and had an average of two children. Of 46 total participants, 31 identified both parents as Holocaust survivors. Most of the participants' mothers were originally from Germany (24 out of 46), while the participants' fathers primarily came from Poland (22 out of 46). When asked the age of their parents during the Holocaust, mothers were most likely to be adolescents (12 were children, 17 were adolescents, and 10 were adults). In contrast, fathers were reported to be primarily adolescents and adults during the Holocaust (8 were children, 16 were adolescents, 18 were adults). Out of 37 mothers identified as Holocaust survivors, 21 were reported to have spent the Holocaust in concentration camps, 21 in labor camps, 17 in a ghetto, 5 in hiding, and 7 "other". Participants indicated that "other" for their mothers included other

countries, an army camp, and the Gestapo. These categories were not mutually exclusive, so that participants could note if their parent spent time in more than one place during the Holocaust. Of 39 fathers reported to be Holocaust survivors, 25 were reported to have been in concentration camps, 19 in labor camps, 13 in a ghetto, 8 in hiding, and 7 “other” (another country or with falsified papers). Interestingly, not a single participant marked “don’t know” for the whereabouts of either parent during the Holocaust, indicating at least minimal communication between the generations about this topic. Approximately half of the participants reported that neither they nor anyone in their family had sought professional help for issues related to the Holocaust.

An alpha coefficient of .76 for fathers and .83 for mothers was obtained for the PPHTS, demonstrating that it has adequate internal consistency. The PPHTS for mothers had a range from 55-100, while the range for the PPHTS for fathers was 54-103. This demonstrates significant within group variability in perceptions of parental traumatization. The PPHTS demonstrated good convergent validity with another measure of perceived trauma, the Clinical Trauma Assessment (CTA; Ruch, Gartrell, Ramelli, & Coyne, 1991). The CTA for fathers correlated significantly with the PPHTS for fathers (.73, $p < .001$), and the CTA for mothers correlated significantly with the PPHTS for both mothers (.55, $p < .001$) and fathers (.61, $p < .001$). PPHTS scores for fathers were significantly correlated with COM4 of the Communication Questionnaire (awareness of the Holocaust at a young age and its nonverbal presence in the home, as conveyed by either parent, Lichtman, 1983; 1984). Children of survivors who perceived their fathers as having been more traumatized by the Holocaust also reported that they had heard about the Holocaust from a young age and that it pervaded their home. PPHTS

scores for perceptions of maternal traumatization were not significantly related to how the Holocaust was communicated. The PPHTS showed discriminant validity from a measure of locus of control, the Rotter Internal/External Locus of Control Scale (IE Scale; Rotter, 1966). There were no significant correlations between the PPHTS and the IE Scale. Discriminant validity was also found for a measure of sex role, the Ben Sex Role Inventory (BSRI; Bem, 1974). There were no significant correlations between the PPHTS and the BSRI.

Conclusions

The PPHTS appears to be a valid and reliable measure of the perceptions of children of Holocaust survivors about their parents' level of traumatization by the Holocaust. The only other measure of this construct (Blumenthal, 1981) is very brief and vague, and does not assess many aspects of parental traumatization that are captured by the PPHTS. Other researchers have examined Holocaust survivors' level of traumatization by determining a priori which events were most likely to have been most traumatic. However, this does not take into account the individual's actual experiences in the Holocaust nor the way they perceived and dealt with them. Since attachment theory posits that an individual's attachment style may be predicted by their parents' level of resolution of trauma, the PPHTS will be a very useful measure for determining the effect of Holocaust traumatization on children of survivors' attachment styles. The PPHTS also demonstrated that there is a range of perceived parental Holocaust traumatization. This is important information as numerous previous researchers have assumed homogeneity in the level of traumatization and/or perceived traumatization of Holocaust survivors. The

children of survivors in this study demonstrated heterogeneity in their perceptions of their parents' levels of Holocaust traumatization.

The Present Study

Based on the literature previously reviewed, this study seeks to explore the relationship between perceived parental traumatization in the Holocaust and attachments to parents and romantic partners. Given that attachment theory has yielded strong findings about the impact of parental traumatization on young children, it will be important to discover if there is a similar impact on adult offspring. Previous attachment research has demonstrated that parents with unresolved loss or trauma are more likely to have their children categorized as having an insecure attachment style with respect to their parents. The current study will explore whether perceived parental traumatization is related to the adult offspring of Holocaust survivors' current attachments to their parents and romantic partners.

Attachment theory has also demonstrated that individuals' perceptions of their parents' caregiving, regardless of their historical accuracy, successfully predict the individuals' later attachments to their parents and to romantic partners. However, none of the research to date has examined individuals' perceptions of their parents' level of trauma, and certainly not to Holocaust traumatization specifically. Since the Holocaust is one of the most devastating and traumatic events of our time, it provides a unique opportunity to examine the impact of the deliberate genocide of a people. Certainly most Jews today are influenced by the legacy of the Holocaust, and this influence is likely to be especially strongly felt by those whose parents or other family members were directly involved in it. However, to date there has been no systematic assessment of varying

levels of traumatization by the Holocaust from the perspective of the survivors' offspring, nor how those levels have impacted later generations.

The current study proposes to assess individuals' perceptions of the level of their parents' Holocaust traumatization. Based on research on survivors of the Holocaust and their children, it is proposed that there will be differences in levels of perceived traumatization, and these differences may be explained by such factors as parental experience during the Holocaust (in a concentration camp, in a labor camp, in hiding, etc.), parents' age during the Holocaust, level of parental religiosity, country of origin, etc. It is hypothesized that those individuals who survived a concentration camp experience and were younger during the Holocaust will be particularly likely to be perceived as having experienced greater levels of traumatization by the Holocaust.

It is further proposed that greater levels of perceived parental Holocaust traumatization will be associated with lower levels of secure attachments to parents and to romantic partners. Children of survivors (COS) who perceive their parents as having been more traumatized are also predicted to be more emotionally dependent/psychologically interconnected to their families. The specific hypotheses that this study will address are as follows:

- 1) Parent-adult attachment styles among COS are related to perceived parental Holocaust traumatization. Individuals who perceive their parents as having been more traumatized will be more likely to have an insecure attachment to their parents. High scores on the PPHTS will be associated with low scores on the P-AASQ for mothers and for fathers.

- 2) COS who perceive their parents as having been more traumatized by the Holocaust are more likely to have insecure attachments to their romantic partner than those who perceive their parents as having been less traumatized. In this case, higher scores on the PPHTS will be associated with higher anxiety and avoidance scores on the ECR. The PPHTS will significantly predict ECR scores in a regression equation.
- 3) COS will generally display high levels of emotional dependence/psychological interconnectedness with their families. Those with higher PPHTS scores are more likely to have higher scores on the Psychological Interconnectedness subscale of the MIS. Those COS who see their parents as more traumatized will have higher levels of emotional dependence/psychological interconnectedness with their families of origin. High scores on the PPHTS will be associated with high scores on the MIS Psychological Interconnectedness scale.

It is notable that the ECR is a measure of the underlying dimensions (anxiety and avoidance) of adult attachment style to an intimate peer. In contrast, the P-AASQ is a measure of type of parent-adult attachment style, with respondents being classified into one of four categories. An analysis of the assessment of dimensions versus types was completed by Fraley and Waller (1998), who concluded that “adult attachment is best represented by a dimensional model.” The ECR, having been developed by selecting the best items of the extant measures of attachment, is the current state of the art in self-report measurement of attachment to significant others. However, the P-AASQ will provide additional information of interest as it assesses adults’ attachment to their

parents. The P-AASQ has the added benefit of being able to be scored as both a categorical and continuous measure of attachment style.

Chapter 3

Method

The purposes of the present study are to investigate (a) the perceptions of adult children of Holocaust survivors regarding their parents' level of traumatization, (b) the impact of these perceptions on the adult children's reported attachment styles with their parents and with their romantic partners, and (c) the relationship between perceived parental traumatization, emotional dependence/psychological interconnectedness, and attachment security. This will help determine the heterogeneity of the population of children of Holocaust survivors in terms of their perceptions of their parents' traumatization, as well as determining the impact of this perceived traumatization on key attachment relationships. Other variables that will be assessed include how the survivor spent their time during the Holocaust, the survivor's age during the Holocaust, the nature of their losses during the Holocaust, and their level of religiosity. This will, therefore, be the first study to empirically determine which, if any, of these variables are associated with traumatization.

Holocaust survivors will be operationally defined as any Jew who survived Nazi oppression and extermination attempts during World War II, 1939-1945. Their offspring, born after this time period, are the targeted participants for this study.

Participants

A total of 173 adult children of Holocaust survivors were recruited to complete a survey packet. Cohen (1992) recommended 85-97 participants to ensure enough participants for either multiple regression or correlational analyses (.80 power for a medium effect size and an alpha of .05). A decision was made to over sample in order to

compensate for missing data. It became apparent early in the data collection that some participants did not complete some of the surveys. One hundred and nine participants completed every item of the survey (except for some demographic questions), and it was this data that was used for the analyses. Participants were recruited from a variety of sources to ensure a diverse sample. The United States Holocaust Museum has an online list of nationwide organizations for children of Holocaust survivors. These organizations were contacted in order to request access to their mailing lists. One organization in Georgia provided a list of approximately 150 children of Holocaust survivors, and they were all contacted. A letter of introduction describing the study, a consent form, and an addressed, stamped envelope was sent to all of the individuals on that list. Other organizations that were unwilling to provide their mailing list were asked to either send out the materials themselves or to provide information about the study in their newsletters. A letter to the editor about the study and requesting participants was sent to every Jewish newspaper in the country that listed an email address. Participants were also recruited through the Internet, through Holocaust and second-generation listserves and websites. About half of the participants completed surveys through the mail, while the other half completed them online.

Seventy-six females (69.7%) and 31 males (28.4%) completed the surveys. Two did not answer this question about their gender. The age of the participants ranged from 35-64, with a mean age of 47 years. The participants were highly educated. They had completed a range of 12-26 years of education, with an average of 18 years of school. Most of the participants (82) were married and living with their spouse. Eight indicated they were never married, 10 reported they were divorced, and 5 were widowed. Four

participants did not answer this question. The majority of participants reported that both of their parents survived the Holocaust (64.2%). More of the parents were born in Poland than in any other country (35.8% of mothers, 45.9% of fathers). Participants' mothers tended to be young during the Holocaust, with 32.1% reported to be a child at the time of the Holocaust, 37.6% reported to be adolescents, and 24.8% reported to be adults. In contrast, participants' fathers were primarily adults during the Holocaust (43%), with a smaller number who were adolescents (34.9%) and even a smaller number who were reported to be children (11%) during that time. Forty-two mothers (38.5%) and 53 fathers (48.6%) of participants had survived a concentration camp during the Holocaust. Thirty-three mothers and 43 fathers survived a labor camp, 27 mothers and 30 fathers survived a ghetto, 32 mothers and 23 fathers survived in hiding during the Holocaust. Nearly all of the participants knew the whereabouts of their parents during the Holocaust - only 2 did not know how their mothers or fathers spent the Holocaust. Fifteen participants reported that their mother was "somewhere else" than the above categories, while 10 reported that their father was somewhere else. Nearly all of these reported that their parent had escaped and was living elsewhere. Level of religiosity for parents during the Holocaust was rated as a mean of 2.6 for both mothers and fathers, placing them in the middle of the range for religious observance (1 was defined as non-religious and 5 as highly observant). Both parents were primarily categorized as Orthodox Jews (34.9% for mothers, 38.5% for fathers). Many participants (46.8%) reported that no one in their family had sought professional help for issues related to the Holocaust. However, 12.8% of participants reported that they had sought help themselves for these issues. Another

5.5% reported that they and a sibling had sought help, while 6.4% indicated that they did not know if anyone in their family had sought help with these issues.

Procedure

The letter of introduction and consent form informed participants about the general purpose of the study and informed them that their participation was strictly voluntary. Those participants who were recruited online received an online letter of introduction and consent form - they were then directed to an online version of the survey once they completed the consent form. Participants learned that their responses will be kept confidential, as no names or identifying information will be reported.

All potential participants who returned the consent form were then mailed the survey packet along with another addressed, stamped envelope (except for those who completed the entire survey online). Those who completed the consent form online and did not immediately complete the survey were emailed up to two reminders to complete the survey. A previous pilot study revealed that most of this population is not interested in monetary remuneration in return for participation (in fact some were offended by the notion of a lottery to win some money). Therefore, no financial compensation is currently planned for participants. This writer informed participants that \$1.00 would be donated to the United States Holocaust Memorial Museum for every completed survey. A copy of a summary of the findings will be made available to any interested participant.

Instruments

Demographic Questionnaire. This brief questionnaire was designed to gather background information on the participants' age, education, and marital or partnership status. It also gathers information on their Holocaust survivor parent(s), including where

the survivor was born, how they spent the Holocaust (in a concentration camp, labor camp, in hiding, etc.), losses they incurred during the Holocaust, how old they were during the Holocaust, and where they went after the Holocaust. It also asks about the family's level of religiosity and whether anyone in the family has sought professional help for issues related to the Holocaust.

Perceived Parental Holocaust Traumatization. (PPHTS: Berger & Lopez, 1999).

Participants were given two versions of this form, one for fathers and one for mothers, depending on which parent was a Holocaust survivor. They were instructed to complete both versions if both parents were survivors. Each version contains 27 items rated on a 1 (very false) to 5 (very true) likert scale. This questionnaire was designed to measure the extent to which participants believe their parents were traumatized by the Holocaust as well as how the parents communicated their Holocaust experience to their children.

This measure was previously pilot tested on a sample of 46 adult children of Holocaust survivors. Please see the earlier section on the pilot study for information on its reliability and validity. For the current study, a total trauma score was created by using the total score on the PPHTS for participants who had one parent who survived the Holocaust, and an average of the mother and father scores for those participants who had two parents who survived the Holocaust. This total score was used in the analyses.

Experience in Close Relationships. (ECR; Brennan, Clark, & Shaver, 1998).

This 36-item questionnaire is a self-report measure of adult attachment security that was derived from every other available measure of adult attachment. Individuals rate their level of agreement with items on a 7-point rating scale (1=Disagree Strongly, 7= Agree Strongly). The ECR is comprised of 2 scales: Anxiety and Avoidance. An example of

an item on the anxiety scale is “I worry about being abandoned.” An example of an item on the avoidance scale is “I prefer not to show a partner how I feel deep down.” Internal reliability for this measure has previously been reported as good, with Cronbach’s alpha coefficients ranging from .89-.92 for the anxiety and .91-.95 for the avoidance scales respectively (Brennan, Clark, & Shaver, 1998; Lopez & Gormley, 2002; Lopez, Mauricio, Smith-Simko, Gormley, & Berger, 2001). Test-retest reliability has been reported as .71 for the avoidance scale and .68 for the anxiety scale after six months, with fifty-seven percent of participants retaining the same attachment style across both timepoints. (Lopez & Gormley, 2002). Men have been found to score higher on the anxiety dimension than women, and to more clearly separate anxiety from avoidance (MacDonald, 1999). Schirmer and Lopez (1998) found that both of the ECR scales significantly predicted self-reported symptoms among a sample of adult workers after controlling for work stress and supervisor support. Lopez et al. (2001) found that anxious attachment was significantly and negatively related to reactive coping, while avoidant attachment was significantly and negatively related to both reactive and suppressive coping. Anxious attachment was significantly and positively related to distress. The ECR was described as having “the best psychometric properties” of four inventories of adult attachment by Fraley, Waller, and Brennan (2000).

Parent-Adult Attachment Style Questionnaire. (P-AASQ, Behrens & Lopez, 1998). This is a self-report measure of attachment style between an adult and the adult’s parent. It is based on the Bartholomew and Horowitz (1991) measure of adult attachment style. The participant is instructed to choose which one of four descriptive paragraphs best describes their relationship with their parents. The four paragraphs represent one of

the four categories of attachment style: “secure”, “preoccupied”, “dismissive”, and “fearful.” The participant is next instructed to rate each of the paragraphs on a 7-point scale (1=not at all descriptive, 7=extremely descriptive) on the degree to which it is descriptive of their relationship with their parent. This provides for both categorical and continuous scoring of the P-AASQ. The authors note that the continuous scoring provided for more robust findings in the pilot testing of the measure. There are two forms of the measure, one for the relationship between the participants and their fathers and one for the relationship between the participants and their mothers. A pilot study of this measure found similar distributions of attachment styles between participants and their parents as previous studies have found between participants and intimate partners. For the P-AASQ Father, one-week test-retest coefficients for each category when scored continuously are as follows: secure, $r = .73$; fearful, $r = .76$; preoccupied, $r = .71$; and dismissive, $r = .55$. The parallel test-retest coefficients for the P-AASQ Mother are: secure, $r = .83$; fearful, $r = .74$; preoccupied, $r = .68$; and dismissive, $r = .61$. (Behrens & Lopez, 1998). Lopez and Hsu (2002) reported that 77% of their sample retained the same classification of attachment style to father and 85% of the sample retained the same classification with their mother over a six-month period. Overall, correlations between the attachment categories measured by the P-AASQ and other measures of adult attachment as well as measures of self-esteem and trust were significantly related and in expected directions.

In the present study, a total security score was derived for the mother and father version of the P-AASQ for the purposes of the analyses. The ratings for the three

insecure types of attachment were reverse-scored, and then combined with the ratings for the secure category.

Multigenerational Interconnectedness Scale (MIS; Gavazzi & Sabatelli, 1987).

This 31 item self-report questionnaire consists of three factor analytically derived subscales: Financial, Functional, and Psychological Interconnectedness. It assesses financial reliance, sharing of daily routines, and emotional dependence on family members. It was originally developed to assess relationships between adolescents and their parents, but has been extended to use with adults and their parents (Mazor & Tal, 1996). An example of an item representing Financial Interconnectedness is "Family members help me pay for large transportation costs (bus, airfare, etc.)." An example of an item representing Functional Interconnectedness is "Family members watch T.V. and go to the movies with me." An example of Psychological Interconnectedness is "I feel upset when family members do not approve of people I am intimate with." Participants are instructed to circle a number from 1-7 that describes how often they experience each item (1=never, 4 = sometimes, 7=always). Alpha coefficients of .86, .82, and .84 for Financial, Functional, and Psychological Interconnectedness have been reported (Gavazzi & Sabatelli, 1987). Correlations between the subscales were moderate, ranging from .47 to .51 (Gavazzi & Sabatelli, 1988). The authors found that individuals who were older and living on their own tended to have lower MIS scores than younger participants and those living with their parents. This finding was also true for those participants whose parents were divorced. Men have consistently scored lower on the MIS than women (Gavazzi & Sabatelli, 1987, 1988, 1990). Psychological interconnectedness was developed to measure aspects of the individuation process. The authors suggested that

high levels of psychological interconnectedness represent more emotional dependency on family of origin, and lower levels of individuation. The wording on the instructions of this measure was modified for the present study to specify "family of origin" to provide clarification for those participants who had created their own family of spouse and/or children. This change was supported by the primary author (S. M. Gavazzi, personal communication, November 20, 2002).

Analysis

Correlations and analysis of variance tests were used to determine whether any of the background variables (participants' age, gender, years of education, age of parent, location of parent during the Holocaust, and parents' level of religiosity) were significantly related to attachment to partner. Several of the background variables were significantly related to the participants' attachment to their partners. These included where the parents were born, the use of therapy, and participants' marital status. Participants with mothers from Romania were significantly more avoidantly attached to their partners than participants with mothers from Hungary or Poland. Participants whose fathers were born in Poland were more avoidantly attached to their partners than participants whose fathers were born in Hungary.

The relationship between the participants' attachment to their partner and their perception of their parents' level of traumatization was initially tested with a correlation coefficient. Later, perceived parental traumatization was included in the regression model. It was predicted that the level of perceived parental traumatization would be significantly related in a negative direction with secure attachment to partner.

Chapter 4

Results

This chapter describes the results of the analyses. It begins with a comparison of characteristics of those participants who completed every item of the survey (except for some demographic questions), and those participants who skipped some of the items and were thus excluded from subsequent analyses. Descriptions of each of the variables follow, and then results pertaining to the main hypotheses and the post-hoc exploratory analyses are presented.

Participants who completed and did not complete every item

The participants who completed the whole survey packet ($n=109$) were compared with those who skipped some items ($n=63$) on their gender distribution, age, years of education, and marital status. The mean scores of the ECR, PPHTS, MIS, and P-AASQ were also compared for the two groups. No differences were found between the groups on any of the variables except age. Those participants who completed every item tended to be a little younger ($M=46.98$, $SD=.65$) than those who skipped some items ($M=49.33$, $SD=.74$), $t(169)=2.30$, $p<.05$. All subsequent analyses are based on those participants who completed every item of the survey.

Instruments

Instrument ranges, means, standard deviations, and reliability estimates are summarized in Table 1. The ECR Avoidant subscale ranged from 18-109, with a mean of 49.43. An alpha coefficient of .93 was obtained for this subscale. The ECR Anxiety subscale ranged from 18-126, with a mean of 64.72. An alpha coefficient of .94 was obtained for this subscale. The PPHTS total trauma scale ranged from 51-108, with a

mean score of 79.93. A Cronbach's alpha coefficient of .85 was obtained for this scale.

The P-AASQ total security scale for mothers ranged from 5-28, with a mean of 19.78.

The P-AASQ total security scale for fathers ranged from 8-28, with a mean of 21.14. An alpha coefficient of .72 was obtained for both the mother and father total security scales.

Scores on the MIS Psychological Interconnectedness subscale ranged from 23-101, with a mean of 62.77. Scores on the MIS Financial Interconnectedness subscale ranged from 4-46, with a mean of 19.12. Finally, scores on the MIS Functional Interconnectedness subscale ranged from 8-54, with a mean of 26.56. Alpha coefficients on these three subscales ranged from .78-.92.

Table 1

Descriptive Statistics

Measure	Scale Range-Possible	Scale Range-Actual	<i>M</i>	<i>SD</i>	α
<u>Attachment to Partner</u>					
ECR Avoidance	18-126	18-109	49.43	23.29	.93
ECR Anxiety	18-126	18-126	64.72	25.92	.94
<u>Perception of Parental Trauma</u>					
PPHTS Total Trauma	27-135	51-108	79.93	12.36	.85
<u>Attachment to Parent</u>					
PAASQ-Mothers	4-28	5-28	19.78	6.10	.72
PAASQ-Fathers	4-28	8-28	21.14	5.86	.72
<u>Dependency on Family of Origin</u>					
MIS Psychological	15-105	23-101	62.77	18.24	.92
MIS Financial	8-56	4-46	19.12	9.65	.78
MIS Functional	8-56	8-54	26.56	10.96	.87

Table 2 exhibits a comparison of the means and standard deviations between the participants in this study and those of a previous study (Lopez, Mitchell, & Gormley, 2002) using the ECR for the anxiety and avoidance scales. The previous study utilized a

sample of college students. A t-test comparing the means of these two groups found no significant differences on either anxiety or avoidance. This suggests that in general, children of Holocaust survivors had similar patterns of attachment to their romantic partners as did a sample of college students.

Table 2

Experiences in Close Relationships Avoidance and Anxiety Scales comparison with this study and college students (Lopez, Mitchell, & Gormley, 2002).

Experiences in Close Relationships Scales	<u>Current Study</u>		<u>Previous Study (College Students)</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Avoidance	49.43	23.29	47.63	18.59
Anxiety	64.72	25.92	63.06	21.26

Table 3 exhibits a comparison of the means and standard deviations between the participants in this study and those of a previous study (Gavazzi, Sabatelli, & Reese-Weber, 1999) using the MIS for the Psychological, Financial, and Functional Interconnectedness Scales. The previous study utilized a sample of college students. A t-test comparing the means of these two groups found significant differences on each scale of the MIS. The current sample ($M=4.19$, $SD=1.22$) scored significantly higher on Psychological Interconnectedness than the previous sample ($M=3.8$, $SD=0.9$), $t(105)=3.26$, $p<.01$. However, the current sample scored significantly lower on Financial Interconnectedness ($M=2.43$, $SD=1.20$) than the previous sample ($M=4.3$, $SD=1.3$), $t(105)= - 16.00$, $p<.001$. Similarly, the current sample scored significantly lower on Functional Interconnectedness ($M=3.32$, $SD=1.37$) than the previous sample ($M=4.2$,

$SD=1.0$), $t(105) = -6.61$, $p < .001$. This suggests that in general, children of Holocaust survivors had higher levels of psychological interconnectedness but lower levels of financial and functional interconnectedness than a group of college students. All three scales have previously been found to be negatively associated with age (Gavazzi & Sabatelli, 1988, Gavazzi, Sabatelli, & Reese-Weber, 1999). Therefore, since the current sample ($M=46.98$) is significantly older than the previous sample ($M=20.4$), $t(107)=41.04$, $p < .001$, lower scores would be expected for all three scales.

Table 3

Multigenerational Interconnectedness Psychological, Financial, and Functional Interconnectedness Scales comparison between this study and a previous study (Gavazzi, Sabatelli, & Reese-Weber, 1999).

MIS Dimensions	<u>Current Study</u>		<u>Previous Study</u>		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Psychological	4.18	1.22	3.8	.9	3.23**
Financial	2.43	1.20	4.3	1.3	-16.00***
Functional	3.32	1.37	4.2	1.0	-6.62***

** $p < .01$, *** $p < .001$

Table 4 displays the correlations between participants' age, years of education, parents' level of religiosity, and the study variables (attachment to partner and parent, perceived parental trauma, and family interconnectedness). Levels of parental religiosity during the Holocaust were significantly intercorrelated for mothers and fathers. None of the other background variables were significantly related to each other or to the study variables.

Table 4

Correlation of Age, Years of Education, and Parents' Religiosity with Study Variables

	Age	Years of Education	Mother's Religiosity	Father's Religiosity
Age	-	.04	.03	.08
Years of Education	.04	-	-.12	-.06
Mother's Religiosity	.03	-.12	-	.52**
Father's Religiosity	.08	-.06	.52**	-
ECR Avoidance	.11	.03	-.06	.06
ECR Anxiety	.01	-.07	-.12	-.08
P-AASQ (Mothers)	-.04	.03	-.00	-.02
P-AASQ (Fathers)	-.12	.11	.03	.11
PPHTS Total Trauma	.13	-.16	.03	.15
MIS Psychological	-.09	-.06	-.06	-.04
MIS Financial	-.13	.02	-.02	-.04
MIS Functional	.01	-.03	-.06	.04

** $p < .01$

Table 5 displays the correlations between the study variables. The ECR Avoidance and Anxiety scores are significantly related to each other as well as the P-AASQ for fathers, the PPHTS total trauma score, and the MIS Psychological Interconnectedness subscale. The ECR Anxiety scores are also significantly related to the P-AASQ for mothers. The P-AASQ for mothers and fathers are also significantly related to each other as well as the PPHTS total trauma score and the MIS Functional Interconnectedness subscale. The PPHTS total trauma score is also significantly related to the MIS Psychological and Financial Interconnectedness subscales. The MIS

Psychological and Financial Interconnectedness scales are significantly intercorrelated, as are the MIS Financial and Functional Interconnectedness scales.

Table 5

Study Variable Intercorrelations

	ECR Avoidance	ECR Anxiety	P-AASQ (Mothers)	P-AASQ (Fathers)	PPHTS Total	MIS Psychological	MIS Financial	MIS Functional
ECR Avoidance	-	.45**	-.16	-.33**	.23*	.27*	-.01	-.06
ECR Anxiety	.45**	-	-.22*	-.45**	.26**	.54**	.00	-.18
P-AASQ (Mothers)	-.16	-.22*	-	.46**	-.42**	.02	.17	.27**
P-AASQ (Fathers)	-.33**	-.45**	.46**	-	-.25*	-.09	.05	.32**
PPHTS Total Trauma	.23*	.26**	-.42**	-.25*	-	.23*	-.20*	.02
MIS Psychological	-.23*	.54**	.03	-.09	.23*	-	.24*	.16
MIS Financial	-.01	.00	.17	.05	-.20*	.24*	-	.29**
MIS Functional	-.06	-.18	.27**	.32**	.02	.16	.29**	-

* $p < .05$, ** $p < .01$

Table 6 is a comparison of gender means and standard deviations with study variables. T-tests indicate that levels of Psychological Interconnectedness were significantly different between men and women. Women scored higher on Psychological Interconnectedness than men, a finding that replicates previous findings for this scale (Gavazzi, Sabatelli, & Reese-Weber, 1999; Mazor & Tal, 1996).

Table 6

Gender Means and Standard Deviations on Study Variables

	<u>Men</u>		<u>Women</u>		
	M	SD	M	SD	<i>t</i>
ECR Avoidance	54.23	23.99	47.16	23.05	1.42
ECR Anxiety	58.55	21.55	67.27	27.45	-1.58
P-AASQ (Mothers)	19.79	5.95	19.82	6.05	-.02
P-AASQ (Fathers)	20.89	6.32	21.20	5.77	-.24
PPHTS Total Trauma	76.73	10.39	81.05	12.92	-1.65
MIS Psychological	54.55	14.96	65.71	18.34	-2.99**
MIS Financial	17.29	10.07	20.14	9.43	-1.38
MIS Functional	27.23	13.37	26.22	10.00	.42

** $p < .01$

Table 7 compares the means and standard deviations for each of the study variables by the participants' marital status. The ANOVA to evaluate the relationship between marital status and avoidant attachment to partner was significant, $F(3, 101)$, $p < .05$. Follow-up tests were conducted to evaluate pairwise differences among the means. The test of homogeneity of variances was non-significant, $p = .351$, therefore the

Tukey test, which assumes equal variances, was used. There were significant differences in mean scores of participants who were married and those who were divorced.

Participants who were divorced were significantly more avoidantly attached to their partners than those who were married and living with their spouse. None of the other study variables were significantly related to marital status.

Table 7

Comparison of Marital Status with Study Variables

	<u>Married</u>		<u>Never Married</u>		<u>Divorced</u>		<u>Widowed</u>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>
ECR Avoidance	46.98	22.78	50.00	22.90	71.60	24.46	45.00	7.07	3.62*
ECR Anxiety	62.26	26.96	72.88	23.59	77.90	21.04	62.00	19.48	1.38
P-AASQ (Mothers)	20.11	6.11	21.57	6.12	20.11	5.75	14.60	3.05	1.53
P-AASQ (Fathers)	21.32	5.80	19.14	7.15	20.25	7.03	22.4	5.41	.42
PPHTS Total Trauma	79.77	13.04	76.88	4.58	79.13	11.25	89.90	5.95	1.29
MIS Psychological	62.39	18.26	59.75	10.67	66.20	21.68	59.20	23.26	.25
MIS Financial	18.87	9.68	22.38	10.69	19.10	8.50	15.60	9.07	.54
MIS Functional	27.43	11.35	24.75	12.00	23.50	9.43	23.60	7.57	.60

* $p < .05$

Table 8 compares the means and standard deviations for each of the study variables by where the participants' mothers were born. The ANOVA to evaluate the relationship between where participants' mothers were born and avoidant attachment to partner was significant, $F(4,88)$, $p < .01$. Follow-up tests were conducted to evaluate pairwise differences among the means. The test of homogeneity of variances was non-

significant, $p=.694$, therefore the Tukey test, which assumes equal variances, was used. There were significant differences in mean scores of participants whose mothers were from Romania and those whose mothers were from Hungary or Poland. Participants whose mothers were from Romania were significantly more avoidantly attached than participants whose mothers were from Hungary or Poland. The ANOVA to evaluate the relationship between where participants' mothers were born and anxious attachment to partner was also significant, $F(4, 88)$, $p<.05$. Follow-up tests were conducted to evaluate pairwise differences among the means, and there were no significant differences among the pairs. The ANOVA to evaluate the relationship between where participants' mothers were born and Financial Interconnectedness was also significant, $F(4, 85)$, $p<.05$. Follow-up tests were conducted to evaluate pairwise differences among the means. The test of homogeneity of variances was significant, $p=.024$, therefore the Dunnett C test, which does not assume homogeneity of variances, was used. There were significant differences in the mean scores of participants whose mothers were born in the United States and those whose mothers were born in Germany. Participants whose mothers were born in the United States were more financially dependent/interconnected with their families of origin than those participants whose mothers were born in Germany.

Table 8

Comparison of Where Participants' Mothers were born with Study Variables

	Germany		Hungary		Poland		Romania		United States		<i>F</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
ECR Avoidance	57.11	23.57	39.22	22.29	44.13	21.48	74.86	74.86	48.25	23.58	3.91**
ECR Anxiety	57.83	23.18	79.33	35.82	56.05	25.66	80.29	30.03	73.98	22.53	3.37*
P-AASQ (Mothers)	18.39	6.60	17.67	5.92	21.37	5.56	20.14	4.67	21.30	5.66	1.41
P-AASQ (Fathers)	20.41	6.75	19.33	8.06	22.43	5.72	18.86	4.22	22.10	4.63	1.06
PPHTS Total Trauma	79.76	14.82	76.83	8.94	78.76	11.51	83.29	10.34	79.55	12.71	.31
MIS Psychological	58.61	16.36	56.00	14.95	61.47	20.60	74.43	19.64	68.15	15.54	1.75
MIS Financial	14.44	5.39	17.78	10.28	19.06	10.82	28.29	11.07	21.80	8.54	3.20*
MIS Functional	24.00	12.03	21.78	11.30	28.53	11.73	29.29	8.98	27.15	9.45	1.06

* $p < .05$, ** $p < .01$

Table 9 compares the means and standard deviations for each of the study variables by where the participants' fathers were born. The ANOVA to evaluate the relationship between where participants' fathers were born and avoidant attachment to partner was significant, $F(5,88), p < .05$. Follow-up tests were conducted to evaluate pairwise differences among the means. The test of homogeneity of variances was significant, $p = .016$, therefore the Dunnett C test, which does not assume homogeneity of variances, was used. There were significant differences in mean scores of participants whose fathers were from Hungary and those whose mothers were from Poland. Participants whose fathers were from Poland were significantly more avoidantly attached than participants whose fathers were from Hungary.

Table 9

Comparison of Where Participants' Fathers were born with Study Variables

	<u>Czechoslovakia</u>		<u>Germany</u>		<u>Hungary</u>		<u>Poland</u>		<u>Romania</u>		<u>United States</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
ECR Avoidance	40.30	23.33	53.43	30.68	31.56	10.99	49.46	20.82	71.00	25.84	47.17	28.25
ECR Anxiety	63.25	27.82	64.79	26.87	66.44	15.23	61.74	26.81	74.40	30.97	65.00	25.22
P-AASQ (Mothers)	22.90	5.11	20.57	7.34	20.78	6.36	19.83	5.62	19.50	5.45	19.83	6.91
P-AASQ (Fathers)	21.70	5.83	18.62	7.77	25.67	2.29	21.77	5.26	19.50	3.70	21.20	6.76
PPHTS Total Trauma	79.75	11.63	79.96	12.87	75.61	12.49	80.25	13.00	82.10	12.17	79.50	14.27
MIS Psychological	61.90	14.79	61.93	17.58	65.38	21.70	61.45	17.43	81.75	11.12	64.50	22.99
MIS Financial	18.70	4.17	18.14	10.30	21.00	10.98	17.73	9.26	30.25	9.78	18.83	9.85
MIS Functional	27.90	5.88	23.93	10.01	25.50	9.53	27.53	12.00	33.00	3.27	27.67	12.68

 $p < .05$

Table 10 compares the means and standard deviations for each of the study variables by the mother's age at the time of the Holocaust. The scores on Financial Interconnectedness varied significantly by mother's age at the time of the Holocaust. Scores on the other study variables did not differ significantly by mother's age at the time of the Holocaust. The test of homogeneity of variances was non-significant, $p=.505$, therefore the Tukey test, which assumes equal variances, was used. There were significant differences in mean scores of participants whose mothers were adolescents as opposed to children or adults at the time of the Holocaust. Participants whose mothers were adolescents at the time of the Holocaust scored higher on Financial Interconnectedness than those whose mothers were either children or adults.

Table 10

Comparison of Mother's Age During the Holocaust with Study Variables

	<u>Child</u>		<u>Adolescent</u>		<u>Adult</u>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>
ECR Avoidance	45.31	23.84	52.76	22.42	49.37	23.72	.97
ECR Anxiety	60.86	26.83	63.32	27.70	69.23	23.21	.95
P-AASQ (Mothers)	20.14	6.60	19.10	5.89	20.42	5.72	.43
P-AASQ (Fathers)	22.52	5.53	20.03	5.93	21.25	6.25	1.63
PPHTS Total Trauma	77.81	13.83	78.88	11.91	82.32	10.37	1.10
MIS Psychological	56.65	19.11	63.60	18.54	67.46	15.40	2.86
MIS Financial	17.00	9.07	22.48	9.99	16.39	8.56	4.58*
MIS Functional	26.18	11.80	26.05	9.51	26.54	12.15	.02

* $p<.05$

Table 11 compares the means and standard deviations for each of the study variables by the father's age at the time of the Holocaust. The ANOVA to evaluate the relationship between father's age at the time of the Holocaust and psychological dependence/interconnectedness with family of origin was significant, $F(3, 93), p < .05$. Follow-up tests were conducted to evaluate pairwise differences among the means, and there were no significant differences among the pairs. Scores on the other study variables did not differ significantly by father's age at the time of the Holocaust.

Table 11

Comparison of Father's Age During the Holocaust with Study Variables

	<u>Child</u>		<u>Adolescent</u>		<u>Adult</u>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>
ECR Avoidance	47.17	26.66	45.08	22.81	50.51	23.05	.60
ECR Anxiety	74.75	32.40	58.00	23.45	65.45	26.09	2.41
P-AASQ (Mothers)	20.83	7.22	21.58	5.52	19.25	5.63	2.29
P-AASQ (Fathers)	21.33	5.93	22.28	5.56	20.70	5.82	.76
PPHTS Total Trauma	76.17	16.17	79.30	11.43	80.48	12.18	.41
MIS Psychological	68.73	14.06	58.65	19.63	62.94	16.35	3.00*
MIS Financial	22.27	9.24	19.35	10.15	18.59	9.65	.45
MIS Functional	23.91	7.61	28.73	11.04	25.59	11.25	.85

$P < .05$

Table 12 compares the means and standard deviations for each of the study variables by whom, if anyone, in the participant's family sought therapy related to the

Holocaust. The ANOVA to evaluate the relationship between participation in therapy and the study variables was significant for anxious attachment $F(4, 91), p < .05$ and perceived parental Holocaust traumatization $F(4, 91), p < .05$. Follow-up tests were conducted to evaluate pairwise differences among the means, and there were no significant differences among the pairs for either anxious attachment or perceived parental Holocaust traumatization.

Table 12

Comparison of Therapy Participation with Study Variables

	<u>Self</u>		<u>Mother</u>		<u>Father</u>		<u>Sibling(s)</u>		<u>No One</u>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
ECR Avoidance	56.05	26.10	50.55	27.94	41.71	18.88	60.67	23.53	45.80	21.27	1.29
ECR Anxiety	74.57	23.16	56.82	25.32	67.43	26.01	88.25	35.97	60.49	25.72	2.61*
P-AASQ (Mothers)	17.67	5.66	22.90	5.34	22.57	5.35	16.83	7.00	20.34	6.27	2.14
P-AASQ (Fathers)	18.90	6.04	22.40	6.59	22.43	4.08	17.50	6.47	21.81	5.76	1.67
PPHTS Total Trauma	83.45	8.35	75.73	12.07	86.07	9.70	90.58	9.65	77.17	13.25	3.21*
MIS	65.62	15.30	62.00	25.32	76.71	14.00	65.67	11.62	61.96	16.51	1.25
Psychological											
MIS Financial	22.67	10.33	18.60	10.04	14.57	8.10	20.67	8.57	19.22	8.97	1.14
MIS Functional	25.90	10.78	25.50	8.26	20.29	7.27	24.17	9.97	27.84	11.27	.91

 $p < .05$

Analyses

Primary Hypothesis: Children of survivors who view their parents as having more unresolved trauma from the Holocaust will have a higher percentage of insecure attachments to their parents and their romantic partners than children of survivors who view their parents as having more completely resolved the trauma of the Holocaust.

Correlations between the ECR, P-AASQ, and PPHTS supported the above hypothesis (see Table 13). Low scores on the ECR Avoidance and Anxiety scales indicate low levels of anxiety and avoidance in relationships with significant others, or secure attachments to partners. High scores on the P-AASQ mother and father version indicate secure attachments to mother and father respectively, and high scores on the PPHTS indicate high perceived levels of parental traumatization by the Holocaust. Therefore, high scores on the PPHTS should be associated with high scores on the ECR Anxiety and Avoidance scales and low scores on the P-AASQ Mother and Father scales. The intercorrelation matrix below demonstrates a significant positive relationship between the ECR and the PPHTS, and a significant negative relationship between the P-AASQ and the PPHTS.

Table 13

Correlation Matrix of Attachment and Perceived Trauma measures

	ECR Avoidance	ECR Anxiety	P-AASQ (Mothers)	P-AASQ (Fathers)	PPHTS
ECR Avoidance	-	.45**	-.16	-.33**	.23*
ECR Anxiety	.45**	-	-.22*	-.45**	.26**
P-AASQ (Mothers)	-.16	-.22*	-	.46**	-.42**
P-AASQ (Fathers)	-.33**	-.45**	.46**	-	-.25*
PPHTS	.23*	.26**	-.42**	-.25*	-

* $p < .05$, ** $p < .01$

Secondary hypothesis: Adult children of Holocaust survivors will generally display high levels of emotional dependence/psychological interconnectedness with their families of origin. Those with higher perceived parental traumatization are more likely to be psychologically interconnected with their families. Adult children of Holocaust survivors did display higher levels of psychological interconnectedness than a control group from a previous study (See Table 3). Psychological interconnectedness to family of origin was related to perceived parental Holocaust traumatization in the expected direction. The Psychological Interconnectedness subscale of the MIS was significantly and positively related to the PPHTS ($r = .231$, $p < .05$).

Regression Analyses: While the above correlational analyses demonstrate relationships among the key variables, a regression analysis was necessary to develop a predictive model. Six regression models were run and compared to determine the “best” model for each dependent variable (ECR Avoidance and ECR Anxiety). These six

models were compared on the basis of eight procedures: the SGMASQ, the Akaike information criterion (AIC), the finite prediction error (FPE), the generalized cross validation (GCV), the Hannan & Quinn (HQ), the Rice, the Schwarz, and the Shibata. Each of these procedures multiplies the residual sum of squares (ESS) by a penalty factor that depends on the complexity of the model. The regression model with the lowest value of a criterion statistic on each of these procedures is determined to be preferable. Based on this comparison, the chosen model to predict avoidant attachment utilized perceived parental Holocaust traumatization, attachment to father, and psychological interconnectedness to family of origin, controlling for age and gender. This combination of predictor variables was significantly related to avoidant attachment to partner $F(5, 94)=4.62, p<.001$. The sample multiple correlation coefficient was .44, indicating that approximately 20% of the variance of the avoidant attachment to partner can be accounted for by a linear combination of the other variables. The best model for the regression equation with anxious attachment as the criterion variable included marital status, perceived parental Holocaust traumatization, attachment to father, and psychological interconnectedness to family of origin, controlling for age and gender. This combination of predictor variables was significantly related to anxious attachment to partner $F(6, 90)=15.02, p<.001$. The sample multiple correlation coefficient was .71, indicating that approximately 50% of the variance of the anxious attachment to partner can be explained by the other variables.

Table 14 demonstrates the relative strengths of the individual predictors for the avoidant attachment to partner model. As expected, there was a negative relationship between secure attachment to parent and avoidant attachment to partner. Perceived

parental traumatization and psychological interconnectedness each had a positive relationship to avoidant attachment to partner. The bivariate correlations were significant for P-AASQ total security score for fathers ($-.32, p < .05$), and MIS Psychological Interconnectedness ($.24, p < .05$).

Table 14

Correlations between each predictor and ECR Avoidant Attachment

<u>Predictors</u>	<u>Correlations between predictor and Avoidant Attachment</u>	<u>Partial correlations between predictor and Avoidant Attachment</u>
<u>Age</u>	.10	.08
<u>Gender</u>	-.07	-.15
<u>PPHTS</u>	.26	.18
<u>P-AASQ (Fathers)</u>	-.32*	-.26*
<u>MIS Psychological</u>	.24*	.24*

* $p < .05$

Figure 1 displays the predicted and observed standardized residuals for the Avoidant Attachment regression model.

Figure 1

ECR Avoidance Standardized Regression Residuals

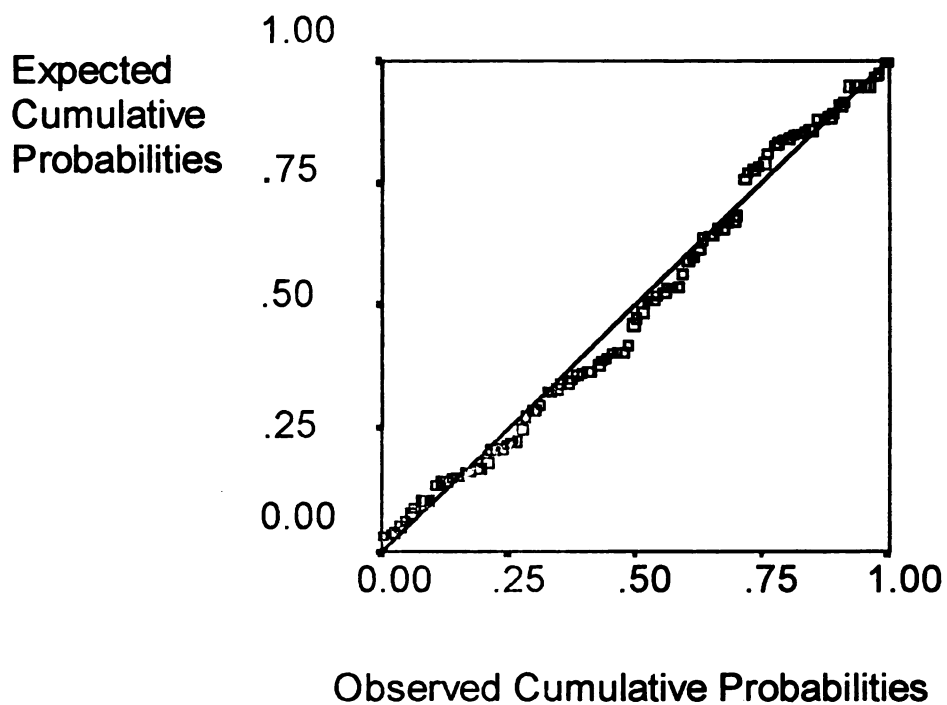


Table 15 demonstrates the relative strengths of the individual predictors for the anxious attachment to partner model. As expected, there was a negative relationship between secure attachment to parent and anxious attachment to partner. Perceived parental traumatization and psychological interconnectedness each had a positive

relationship to anxious attachment to partner. The bivariate correlations were significant for P-AASQ total security score for fathers ($-.45, p<.001$), and Psychological Interconnectedness ($.55, p<.001$).

Table 15

Correlations between each predictor and ECR Anxious Attachment

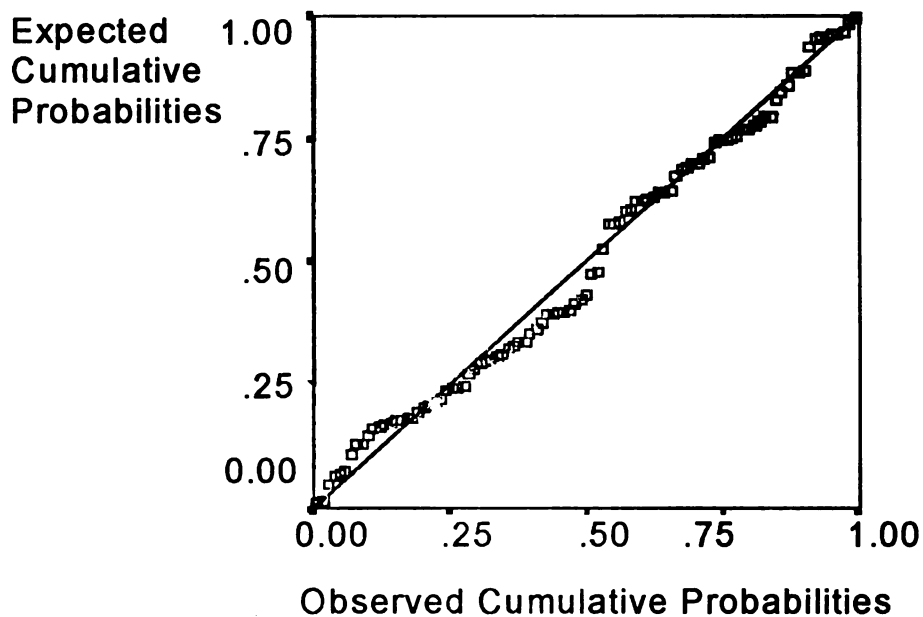
<u>Predictors</u>	<u>Correlations between predictor and Anxious Attachment</u>	<u>Partial correlations between predictor and Anxious Attachment</u>
<u>Age</u>	.01	.02
<u>Gender</u>	.20	.05
<u>Marital Status</u>	-.15	-.16
<u>PPHTS</u>	.32	.19
<u>P-AASQ (Fathers)</u>	-.45***	-.45***
<u>MIS Psychological</u>	.55***	.54***

*** $p<.001$

Figure 2 displays the predicted and observed standardized residuals for the Anxious Attachment regression model.

Figure 2

ECR Anxiety Standardized Regression Residuals



Summary of Findings

The results of this analysis provide evidence that security of attachment to partner is predicted by perceived parental trauma, psychological interconnectedness in the family of origin, attachment to father and marital status. Participants who perceived their parents as more traumatized by the Holocaust, were insecurely attached to their fathers, and were more emotionally dependent/psychologically interconnected with their family of origin were more likely to be avoidantly attached to their romantic partners.

Participants who were not married, perceived their parents as more traumatized by the Holocaust, were insecurely attached to their fathers, and were more emotionally dependent/psychologically interconnected with their family of origin were more likely to be anxiously attached to their partners. These findings will be explored in more detail in the following chapter.

Chapter 5

Discussion

Summary of Results

This study was conducted to determine if perceived parental Holocaust traumatization is predictive of individuals' attachment security. Three primary hypotheses were tested:

- 1) Parent-adult attachment styles among COS are related to perceived parental Holocaust traumatization. Individuals who perceive their parents as having been more traumatized will be more likely to have an insecure attachment to their parents. High scores on the PPHTS will be associated with low scores on the P-AASQ Mother and Father scales.
- 2) COS who perceive their parents as having been more traumatized by the Holocaust are more likely to have insecure attachments to their romantic partner. In this case, higher scores on the PPHTS will be associated with higher scores on the ECR Avoidance and Anxiety scales. The PPHTS will significantly predict ECR Avoidance and Anxiety scores in a regression equation.
- 3) COS will generally display high levels of emotional dependence/psychological interconnectedness with their families. Those COS who see their parents as more traumatized will have higher levels of emotional dependence/psychological interconnectedness with their families of origin. Those with higher PPHTS scores are more likely to have higher scores on the Psychological Interconnectedness subscale of the MIS.

The first hypothesis, concerning the relationship between perceived parental Holocaust traumatization and attachment to parent, was supported by the analyses. Secure attachment to both parents was significantly negatively correlated with perceived parental Holocaust traumatization.

The second hypothesis was also supported by the analyses. Individuals who perceived their parents as having been more traumatized by the Holocaust were more avoidantly and anxiously attached to their partners. The regression analysis determined that perceived parental Holocaust traumatization predicted both avoidant and anxious attachment to partner.

The third hypothesis was supported by the analyses. Adult children of Holocaust survivors did display higher levels of psychological interconnectedness than a group from a previous study. There was a significant relationship between psychological interconnectedness and perceived parental Holocaust traumatization. Individuals who perceived their parents as having been more traumatized by the Holocaust were more likely to be psychologically interconnected with their families of origin.

Secondary hypotheses concerned the relationship between the background variables, perceived parental Holocaust traumatization, and attachment security. As expected, marital status was significantly related to attachment to partner, with divorced participants more avoidantly attached to their partners than married participants. Interestingly, marital status was not significantly related to anxious attachment to partner. However, marital status was a predictor in the anxious attachment regression model, but not the avoidant attachment regression model. A review of the literature did not reveal any relevant research on the relationship between attachment and marital status, so more

research will be necessary to clarify the relationship between marital status and attachment to partner.

The participants' parents' country of origin was related to participants' attachments to their partners. Participants whose mothers were born in Romania were significantly more avoidantly attached than those whose mothers were from Hungary or Poland. Mothers' country of origin was also significantly related to participants' anxious attachment to partner. Participants whose fathers were born in Poland were significantly more avoidantly attached to their partners than those whose fathers were born in Hungary. There were some major cultural differences in how individuals from different countries experienced the Holocaust, and this might partially explain these findings. Poland lost 90% of its Jewish population, Hungary 70%, and Romania 50% (Dawidowicz, 1975). Poland was occupied immediately in the war (September 1, 1939), and suffered the greatest loss of Jewish life (three million Jews killed). Most Jews in prewar Poland were lower-middle-class workers. They were subjected to terror and random violence, then ghettoized, and finally deported to death camps. In contrast, Jews were predominantly middle-class in Hungary. Hungary was not occupied by Germany in force until March 1944, at which time mass deportations took place. Over 450,000 Hungarian Jews "were deported, murdered, or died under German occupation." (Dawidowicz, 1975, p. 382-383).

Participation in therapy was significantly related to both attachment to partner and to perceived parental Holocaust traumatization. It is difficult to draw conclusions about these findings as no significant differences emerged in the analyses of the pairwise comparisons. However, one interesting trend is that of participants whose mothers

engaged in therapy related to the Holocaust – those participants reported less anxious attachments to their partners and less perceived traumatization of their parents. It is possible that mothers' participation in therapy had a buffering effect for themselves and their offspring. Again, further research will be necessary to clarify these findings.

None of the other background variables were related to perceived parental Holocaust traumatization or to attachment. Since some previous researchers determined parental traumatization on the basis of where the survivor spent the Holocaust, these findings put that practice into question. Sorscher and Cohen (1997) and Last and Klein (1981, 1984a, 1984b) all determined parental traumatization based on a priori expectations. They expected that individuals who spent the Holocaust in concentration camps would be more traumatized than individuals who spent the Holocaust in other ways (such as in a ghetto, labor camp, or in hiding). The current research does not support this assumption. Perceived parental traumatization was not related to where participants' parents spent the Holocaust. Similarly, in contrast to suggestions generated by the previous pilot study, perceived parental traumatization was not related to parents' level of religiosity or their age at the time of the Holocaust.

Interestingly, the comparison of regression models determined that the strongest model for both avoidant and anxious attachment was one which included attachment to father as a predictor for attachment to partner, but not attachment to mother. This may be due to the fact that the sample was predominated by females, who may be more likely to base their model for attachment to partner on their model of their relationship with their fathers.

Comparison to Previous Studies

Two primary areas of literature were reviewed for this study: the literature on attachment theory and the literature on COS. The present study supports and extends the research in both of these areas, and integrates them in a way that has not previously been done. Research in attachment theory has previously found relationships between parental trauma and offspring attachment insecurity (Ainsworth & Eichberg, 1991; Bakermans-Kranenburg, Schuengel, & van Ijzendoorn, 1999; Main & Hesse, 1990; and Schuengel, van Ijzendoorn, Bakermans-Kranenburg, & Blom, 1998). However, this literature primarily focused on traumatized mothers and their young offspring. Steele, Steele, and Fonagy (1996) conducted one of the few studies to examine the relationship between paternal traumatization as well as maternal traumatization on infants' attachment styles. They found that maternal unresolved loss or trauma was related to infant disorganized attachment, but no such relationship was found for paternal unresolved loss or trauma. Benoit and Parker (1994) were the only researchers to examine the relationship between parental trauma and attachment security for adults. Benoit and Parker did not find a relationship between grandmothers' unresolved trauma (as assessed by the AAI) and their adult daughters' attachment security (also assessed by the AAI). The present study, in contrast, did find relationships between parents' trauma and their adult offspring's attachment security. These contrasting findings may be due to differences in measurement (in parents' trauma as well as offspring's attachment), population differences (Benoit & Parker did not study children of Holocaust survivors) or the timing of the trauma. It is possible that the grandmothers' unresolved trauma in the Benoit and

Parker study was from an event late in life, which did not affect their offspring's attachment security.

The current study extends this research by providing evidence for the relationship between traumatized parents and their adult offspring's attachment security. Adults are underrepresented in the current literature on the intergenerational effects of trauma on attachment security. Finally, the current study is specific to Holocaust survivors and their children. It is the first empirical study of the attachment security of children of Holocaust survivors, and how this security is affected by perceptions of parents' trauma.

The current study also supports and extends the literature on COS. Yehuda, Schmiedler, Elkin, et al. (1998) noted that "the literature on the offspring of Holocaust survivors is divided into two 'camps': those who described the adverse effects of the Holocaust, and those failing to note these detrimental effects." (p. 640). They attributed this dichotomy to the heterogeneity of the population, and suggested that future research should explore within-group variability in parental symptomatology to determine if that clarified some of the disparate findings in the research literature. The present study was conducted to determine if within-group variability in COS' attachment security could be explained by their perceptions of their parents' traumatization. Analyses supported this proposition and revealed that children of survivors are a heterogeneous population, and should not be treated as homogeneous.

While much of the clinical literature on COS has revealed evidence of psychopathology in this population, these findings have not typically been borne out by empirical research utilizing COS from the general population rather than clinic samples. The current study, which did not use a help-seeking sample, found no differences in the

current sample of COS and a previous sample of college students on their overall ratings of attachments to their partners. As noted previously, while there were no differences between these groups overall, differences in attachment security for COS could be seen when perceived parental Holocaust traumatization was taken into consideration. It was only those participants who saw their parents as more traumatized who had correspondingly lower levels of attachment security to their parents and partners.

Mazor and Tal (1996) found that COS demonstrated higher levels of psychological interconnectedness than a control group (as measured by the MIS). The children of survivors in the present study had similarly high levels of psychological interconnectedness. This level of emotional dependency on family of origin echoes the work of Brom, Kfir, and Dasberg (2001) who found that COS had greater difficulty with separation and individuation in their relationships with their partners and children.

Dasberg (1987) concluded in his review of the literature that COS lack psychosocial maturity and feel that they have to be high achievers to compensate for what has been lost. These conclusions found some support in the current study. High scores on psychological interconnectedness, which were found in this sample, may be indicative of a lower level of psychosocial maturity. There is also some support for Dasberg's conclusion that this population tends to be high achievers. The current sample was highly educated, with an average of nearly 18 years of education (equivalent to a masters degree). However, the motivation for this high level of achievement cannot be determined from the present study. Last (1988) also reviewed studies that found that COS were more dependent than the general population. Dependency, like psychosocial maturity, appears to be related to psychological interconnectedness.

The present study is the first to assess parental traumatization from the perspective of the offspring of Holocaust survivors (with the exception of Blumenthal, 1981, who used a primitive measure). Since much of the research on adult attachment theory is dependent on the perceptions of offspring about their parents, this is a crucial step in linking these two areas of research. Research on adult attachment theory utilizes perceptions of early parenting experiences to categorize adults into attachment categories. Recent research in this area has asked adults about specific experiences of loss and trauma. The adult attachment literature has not yet developed a measure of perceptions of parents' trauma.

Theoretical Implications

Attachment theory has provided strong evidence for the link between unresolved parental trauma and offspring's attachment security. The present study confirmed this link and extended previous findings. There is now evidence for a relationship between the *offspring's perceptions* of parental trauma (as compared to the parents' or researchers' perspective) and attachment security. The research literature on attachment theory has tended to focus on mothers and their young (infant and toddler) children. The present study extends these findings to adult offspring, and examines relationships with and perceptions of mothers and fathers.

The research literature on children of Holocaust survivors has been plagued with contradictory findings. Some research, (particularly the clinical, anecdotal literature), has concluded that children of Holocaust survivors present with more psychopathology than the general population. Other research, (particularly the empirical literature), has found few differences between children of survivors and control groups. The present study

utilized a non-clinical sample of children of survivors to examine within-group differences in this population. As a result, the present study was able to extend the knowledge base about this population by demonstrating within-group differences in attachment security as predicted by perceived parental Holocaust traumatization. The present study was also the first to empirically demonstrate a link between perceived parental Holocaust traumatization and security of attachment to parent and partner.

Research Implications

The present study was the first to utilize a novel measure of perceived parental Holocaust traumatization. In the present study as well as the previous pilot study, this measure has demonstrated adequate reliability and validity. Its development may be useful to other researchers examining the impact of the Holocaust. Particularly since the survivors of the Holocaust are themselves growing more elderly, it is important to be able to measure the impact of their experiences on the next generation.

The present study was also the first to use the ECR as a dependent variable rather than as a predictive variable. This is somewhat surprising since much of the theory lends itself to predicting attachment security.

The P-AASQ was also used in a novel way in the current study. This relatively new instrument (Behrens & Lopez, 1998) had previously been used in a study with the ECR (Lopez & Hsu, 2002). However, that study categorized participants on the basis of which paragraph they selected. In contrast, in the present study the responses were scored continuously, providing for more robust findings. The P-AASQ scores in the present study could easily be utilized in correlational or regression analyses.

The current study demonstrated that there are within-group differences in children of survivors' perceptions of their parents' Holocaust traumatization. However, these differences are not determined by how the parents spent the Holocaust. Therefore, future research should not use a priori definitions of parental trauma as has been done previously.

Applied Implications

The current study has some interesting implications for practice. In contrast to some of the clinical literature, these results call into question the notion that COS per se possess more psychopathology than the general population. In fact, the current sample had similar levels of attachment security as a college population (Lopez, Mitchell, & Gormley, 2002). However, some COS do experience more difficulties than others. These difficulties manifest themselves in the offspring's attachments to their parents and partners, and in their ability to psychologically separate from their family of origin. Clinicians working with this population would do well to assess COS' perceptions of their parents' traumatization rather than making assumptions about it.

Design and Internal Validity

The current study was correlational in nature and therefore it is not possible to say that perceived parental trauma causes attachment insecurity. It is possible that causation was actually in the opposite direction, and that individuals who are insecurely attached to their parent and/or partner perceive their parents as more traumatized by the Holocaust. However, the current formulation is supported by the literature on attachment theory. Other, prospective studies, have already determined that unresolved parental loss or trauma is associated with offspring's attachment insecurity.

Although Solkoff (1981, 1982) recommended that studies of COS should utilize control groups before making inferences about this population, the current study did not do so. The rationale for this decision was that there is currently a lack of clarity in the literature about within-group differences, and so the current study focused on explicating some of those differences. Therefore, on the basis of this research, it is not possible to say whether the current sample differed in any meaningful way from individuals who were not children of Holocaust survivors.

External Validity and Generalizability

The current study attempted to correct for some of the generalizability issues in previous research by using a non-clinical sample. Participants from all over the country completed the surveys both online and in mailed packets. They were recruited from children of Holocaust survivor organizations, Jewish newspapers, and online list serves and websites. As a result, many of the participants may have strongly identified with the concept of themselves as children of survivors. It is possible that a more epidemiologically based recruiting method would have resulted in a sample of participants who did not view their COS status as centrally as did the current sample. Unfortunately, there is no national registry of Holocaust survivors or their children in the United States, so unless the research was done in Israel, where such a list exists, an epidemiological study would have been quite challenging.

Another issue potentially affecting external validity in the current study is the issue of gender differences. Many more women (70%) than men (28%) completed the surveys. Although no gender differences were found for most of the study variables, they were present for the Psychological Interconnectedness subscale of the Multigenerational

Interconnectedness Scale. Since this subscale was strongly correlated with the ECR as well as the PPHTS, it is possible that gender differences indirectly influenced the overall findings. The regression models controlled for gender in order to take this possibility into account. Gender was not a significant predictor in the regression analyses.

Measurement Issues

There were several difficulties with measurement in the current study. These ranged from including all of the potentially important variables in the demographic questionnaire to using instruments not specifically designed for this population. The demographic questionnaire gathered data on many potentially relevant issues for this population. However, as the analyses progressed, it became clear that other data would also have been helpful. While there were a number of choices for participants to indicate their marital status, there was no way to indicate if they were in a gay or lesbian committed relationship. Also, there were no items assessing whether participants' parents were still alive or whether they had siblings also completing the surveys. All of this information would have been helpful for the analyses.

There were also some difficulties with the instruments, as most were not designed specifically for this population. The ECR, P-AASQ, and MIS were all designed for late adolescents/college students. The MIS has previously been utilized with adult children of Holocaust survivors and the directions were even modified in order to provide clarity for these participants who have mostly created their own families. However, many participants in the current study still reported finding it frustrating and a large number of participants did not complete it. In retrospect, Skowron & Friedlanders' (1998) Differentiation of Self Inventory might have been a better choice than the MIS as it was

initially validated on an adult population. Unfortunately, there are very few instruments designed specifically for this population. A thorough review of the literature yielded no suitable measure of parental traumatization, and so the PPHTS was developed for this study. The ECR is the best current measure of adult attachment using survey methodology. The present study did not utilize a measure of social desirability, which may have also influenced the results.

Autobiographical Material

Participants were asked to respond to three open-ended questions in the Demographic Questionnaire. These included questions about the nature of their parents' losses, their perceptions of how these losses impacted the way they were parented, and whether these perceptions have changed over time. Responses ranged from one-word answers to narrative essays. To protect participants' confidentiality, their direct quotes are not provided here. Instead, relevant samples are drawn from the literature.

Parents' losses

Participants responded to the following direction: "Please describe to the best of your knowledge the types of losses your parent experienced during the Holocaust." They spoke of losing entire families, of losing one's country and belongings. It was common for the parents of participants to be the only surviving members of their families. These responses demonstrate some of the extent of the losses suffered by the families of the participants. Many noted the impact of the loss of a parent or parents for their own parents during the Holocaust. Some participants went on to speculate as to the impact of the loss of a parent on their own parent's childrearing abilities. Hass (1990) indicated that in addition to the loss of family members, many survivors "returned to their homes to

encounter hostility and confiscation of their property by the local population” (p. 22).

Wiesel (1960) eloquently described the many losses that he experienced in the Holocaust. He and his family lost their home, and then he was separated from his mother and sisters at Auschwitz. Immediately upon his arrival there, he was deliberately and systematically de-humanized and brutalized. He reported that he lost much of his soul and his faith, along with most of his immediate family.

Impact of Losses on Parenting

The next question asked “Do you think that your parents’ losses impacted the way you were parented by them? If so, how?” Most participants did feel that their parents’ losses had impacted their parenting, and some specifically felt that the loss of a parental role-model negatively impacted their parents’ ability to raise them. Hass (1990) interviewed COS and obtained parallel responses: Normal, developmental separations may have been too much to endure for some Holocaust survivor parents, so that their children had difficulty establishing their own identities. Hass also noted that nearly every COS he interviewed indicated that their perceptions of the world could be characterized by “fear, mistrust, [and] cynicism.” (p. 37). He provided many examples of his participants’ interviews in which they described how their parents instilled a sense of fear and suspicion in them regarding the outside world. Many reported that they were taught the value of education, as that was something that could never be taken from them. Like the participants in the current study, Hass himself as well as his participants describe a keen sense of guilt over any display of negative feelings. He reported frequently hearing, “For this I survived the camps?” (p. 51). This refrain could be expected in response to talking back, coming home later than planned, or being injured. Epstein (1979),

describing her first interview for her book *Children of the Holocaust*, noted that all five participants in her initial interview (including herself) were named after people murdered during the war. Wardi (1994) characterized this phenomenon as “memorial candles”, the process in which the second generation physically represents lost family members.

Change in Perceptions over Time

The final open-ended question asked “Have your perceptions of your parents’ traumatization by the Holocaust changed over time? Do you have a different understanding now of your parents’ traumatization than you did as a child or adolescent?” Most of the participants indicated that their perceptions of their parents’ trauma had changed over time. They seemed to gain a deeper understanding and appreciation of their parents’ experiences as they grew older. In some cases, this was due to their parents’ sharing more information with the passage of time. Many expressed increased respect and admiration for their parents and what they had survived. Epstein (1979) provided several anecdotes of COS who found out much more about their parents’ experiences during the Holocaust when the COS themselves were adults.

Neumann (1997) described the transformation of her perceptions of her mother’s Holocaust experience in several stages. She initially constructed a story of her mother’s experiences from fragments told to her by her mother, combined with her own thoughts and images. Later, as an adult, she began more formally interviewing her mother about her experiences. These transcribed interviews formed the second stage of Neumann’s perceptions. A third stage developed from Neumann’s mother’s account of her experiences in the process of obtaining reparations from the German government. This account was the most detailed telling of the experience. Neumann noted that she came

“closer in myself to the story I know of my mother’s life, and she too has come closer to me.” (p. 105).

Participants in this study provided a wealth of qualitative information through these three open-ended questions. They indicated that their parents had experienced tremendous losses of their families, friends, businesses and homes. Most felt that these losses negatively impacted their parents’ ability to raise them. However, a few indicated just the opposite. The participants who wrote of their parents’ optimism, empathy for others, and activism are examples of this.

Future Directions

The current study successfully demonstrated that within-group differences do exist within the COS population. Future studies should take these differences into account when examining this population, and then could use control groups more appropriately. For example, it might be interesting to compare the attachment security of children of survivors with the attachment security of children of parents traumatized in other ways. It would also be useful to determine if the findings from the current study could be replicated in other cultures. There are large populations of COS in Israel and Australia, among other places, and it is not clear if cultural differences might affect the results. An Israeli sample would offer some unique research possibilities, including the option of utilizing an epidemiological approach, and the possibility of examining the impact of communal living for those who were raised on kibbutzim. Alternatively, one could examine the attachment styles of children of survivors of other genocides, to determine if they were affected similarly.

It would be helpful to replicate some of the findings on the relationships between the background variables and the main study variables. These include the impact of the survivors' country of origin and age at the time of the Holocaust. The relationship between the use of therapy and perceptions of parental Holocaust traumatization as well as attachment to partner could also be further explored.

It would be particularly helpful for future research to focus on developing a reliable and valid self-report measure of adult attachment that is designed for adults, in contrast to college students. While much of the current research on adult attachment is focused on college students due to convenience, there is much valuable information to be learned about older adults.

The current study was not focused on examining psychopathology within this population. It is possible that future studies could determine if perceived parental traumatization is linked to difficulties in offspring's functioning other than attachment security.

Given the high preponderance of female participants in the current study, it would be useful for future studies to obtain a more equal representation of males and females. This might also help clarify the surprising finding that attachment to father was a stronger predictor of attachment to partner than was attachment to mother.

Summary

It was the intent of this study to investigate the link between perceived parental Holocaust traumatization and attachment security. This research has provided evidence of this link, and developed a predictive model of attachment to partner for this population. Marital status, perceived parental Holocaust traumatization, attachment to

father, and psychological interconnectedness with family of origin were all found to predict attachment to romantic partner. Hopefully, this study will stimulate future research on the effects of the Holocaust on the attachment security of future generations.

APPENDICES

Appendix A

Demographic Questionnaire

Thank you for agreeing to participate in my research project. The following questions ask about your background and about the background of your parent(s). Please circle the appropriate number under each of the items below or enter the correct information in the blank spaces that are provided.

1. Name: _____
2. Your sex: (circle one)
 - (1) Male
 - (2) Female
3. Your current age: _____
4. How many years of education have you completed? _____
5. What is the highest educational degree you have attained? _____
6. What is your marital status?
 - (1) married and living with spouse
 - (2) separated
 - (3) never married
 - (4) divorced
 - (5) widowed
7. Which of your parents is a Holocaust survivor?
 - (1) Mother
 - (2) Father
 - (3) Both
8. In what country were your parents born?
Mother: _____
Father: _____
9. How old were your parents when the Holocaust began?

Mother:	Father:
(1) Child (0-12 years)	(1) Child (0-12 years)
(2) Adolescent (13-18)	(2) Adolescent (13-18)
(3) Adult (over 18)	(3) Adult (over 18)
(4) Don't know	(4) Don't know
(5) Does not apply	(5) Does not apply

10. Where were your parents during the Holocaust (please circle all that apply):

Mother:

- (1) Concentration Camp
- (2) Labor Camp
- (3) Ghetto
- (4) In hiding
- (5) Other: _____
- (6) Don't know
- (7) Does not apply

Father:

- (1) Concentration Camp
- (2) Labor Camp
- (3) Ghetto
- (4) In hiding
- (5) Other: _____
- (6) Don't know
- (7) Does not apply

11. Where did your parents go immediately after the Holocaust? (i.e. - to the U.S., Israel, Brazil, etc.)

Mother: _____

Father: _____

12. During the Holocaust, what was your parents' identified religion? If possible, please specify (Orthodox Jew, Conservative Jew, nonreligious/secular, etc.)

Mother: _____

Father: _____

13. Please rate your perception of your parents level of religiosity during the Holocaust. On a scale of 1-5, with 1 being not at all religious and 5 being very devout/observant.

Mother: _____

Father: _____

14. Have you or your parents (to your knowledge) ever sought professional help for issues related to the Holocaust (e.g., counseling, psychotherapy)?

- (1) Self
- (2) Mother
- (3) Father
- (4) Sibling(s)
- (5) Family therapy
- (6) No one in my family has ever sought this type of help.
- (7) Don't know

15. Please describe to the best of your knowledge the types of losses your parent experienced during the Holocaust.

16. Do you think that your parents' losses impacted the way you were parented by them? If so, how?

17. Have your perceptions of your parents' traumatization by the Holocaust changed over time? Do you have a different understanding now of your parents' traumatization than you did as a child or adolescent?

Appendix B

PPHTS

Directions: Under each item is a scale, with items ranging from 1-5. Think about how these items applied to you as you were growing up. Please circle a 1 for those impressions of your parent that did not apply to your experiences, a 2, for those which apply sometimes, a 3 for those about which you are unsure, a 4 for those which apply fairly often, and a 5 for those which apply all the time. **Please note: The first portion of this questionnaire refers to your impressions of your mother and the second portion to your father. If only one of your parents is a survivor of the Holocaust, please fill out only that section which applies to that parent.**

Perceptions of Mother's Experiences

1. My mother had difficulty talking about the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

2. My mother could talk about the Holocaust in general terms, but not about her specific experiences.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

3. My mother avoided any public activity related to the Holocaust (museums, survivor groups, etc.).

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

4. I think that my mother recovered fairly well from the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

5. My mother was plagued by recurring nightmares of the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

6. My mother tended to talk about the Holocaust in very specific detail.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

7. I feel that I have a fairly accurate understanding of my mother's life before and during the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

8. My mother never spoke of her Holocaust experience.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

9. My mother was prone to unexplained bouts of depression.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

10. My primary way of knowing of my mother's Holocaust experience is through small bits of conversation, things left unsaid, and my own imagination.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

11. I feel that my mother told me about her Holocaust experience in ways that matched my ability to understand as I was growing up.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

12. My mother willingly spoke about her Holocaust experience to educate others (schools, synagogues, etc.).

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

13. As I was growing up, my mother discouraged discussion of the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

14. When I was growing up, I heard many stories about the Holocaust on a regular basis.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

15. I think that my mother's personality was forever changed by the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

16. I often wonder what really happened to my mother during the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

17. I think that my mother grew to be a stronger person because of the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

18. My mother continually mourned family members lost in the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

19. My mother appeared driven to repeat stories of the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

20. My mother appeared to react to things much less emotionally than other mothers I knew.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

21. The trauma of the Holocaust left an indelible mark on my mother's personality.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

22. In my opinion, my mother never "came to terms" with the trauma she suffered during the war.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

23. My mother's Holocaust experience created an enduring sense of emptiness and loss in her life.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

24. My mother appeared to react to things much more emotionally than other mothers I knew.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

25. My mother was preoccupied with thoughts of family members lost in the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

26. My mother seemed to be shut down emotionally.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

27. My mother avoided anything related to the Holocaust in the home (books, movies, etc.).

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

Perceptions of Father's Experiences

1. My father had difficulty talking about the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

2. My father could talk about the Holocaust in general terms, but not about his specific experiences.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

3. My father avoided any public activity related to the Holocaust (i.e., museums, survivor groups, etc.)

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

4. I think that my father recovered fairly well from the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

5. My father was plagued by recurring nightmares of the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

6. My father tended to talk about the Holocaust in very specific detail.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

7. I feel that I have a fairly accurate understanding of my father's life before and during the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

8. My father never spoke of his Holocaust experience.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

9. My father was prone to unexplained bouts of depression.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

10. I've developed a picture of my father's Holocaust experience through small bits of conversation, things left unsaid, and my own imagination.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

11. I feel that my father told me about his Holocaust experience in ways that matched my ability to understand as I was growing up.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

12. My father willingly spoke about his Holocaust experience to educate others (schools, synagogues, etc.).

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

13. As I was growing up, my father discouraged discussion of the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

14. When I was growing up, I heard many stories about the Holocaust on a regular basis.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

15. I think that my father's personality was forever changed by the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

16. I often wonder what really happened to my father during the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

17. I think that my father grew to be a stronger person because of the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

18. My father continually mourned family members lost in the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

19. My father appeared driven to repeat stories of the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

20. My father appeared to react to things much less emotionally than other fathers I knew.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

21. The trauma of the Holocaust left an indelible mark on my father's personality.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

22. In my opinion, my father never "came to terms" with the trauma he suffered during the war.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

23. My father's Holocaust experience created an enduring sense of emptiness and loss in his life.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

24. My father appeared to react to things much more emotionally than other fathers I knew.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

25. My father was preoccupied with thoughts of family members lost in the Holocaust.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

26. My father seemed to be shut down emotionally.

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

27. My father avoided anything related to the Holocaust in the home (books, movies, etc.).

1	2	3	4	5
very false	mostly false	not sure	mostly true	very true

Appendix C

ECR

Instructions: The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale.

Disagree Strongly			Neutral/Mixed			Agree Strongly
1	2	3	4	5	6	7

- ___ 1. I prefer not to show a partner how I feel deep down.
- ___ 2. I worry about being abandoned.
- ___ 3. I am very comfortable being close to romantic partners.
- ___ 4. I worry a lot about my relationships.
- ___ 5. Just when my partner starts to get close to me, I find myself pulling away.
- ___ 6. I worry that romantic partners won't care about me as much as I care about them.
- ___ 7. I am uncomfortable when a romantic partner wants to be close.
- ___ 8. I worry a fair amount about losing my partner.
- ___ 9. I don't feel comfortable opening up to romantic partners.
- ___ 10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.
- ___ 11. I want to get close to my partner, but I keep pulling back.
- ___ 12. I often want to merge completely with romantic partners, and this sometimes scares them away.
- ___ 13. I am nervous when partners get too close to me.
- ___ 14. I worry about being alone.
- ___ 15. I feel comfortable sharing my private thoughts and feelings with my partner.
- ___ 16. My desire to be very close sometimes scares people away.
- ___ 17. I try to avoid getting too close to my partner.
- ___ 18. I need a lot of reassurance that I am loved by my partner.
- ___ 19. I find it relatively easy to get close to my partner.
- ___ 20. Sometimes I feel that I force my partners to show more feeling, more commitment.
- ___ 21. I find it difficult to allow myself to depend on romantic partners.
- ___ 22. I do not often worry about being abandoned.
- ___ 23. I prefer not to be too close to romantic partners.
- ___ 24. If I can't get my partner to show interest in me, I get upset or angry.
- ___ 25. I tell my partner just about everything.

Disagree Strongly			Neutral/Mixed				Agree Strongly
1	2	3	4	5	6	7	

- ___ 26. I find that my partner(s) don't want to get as close as I would like.
- ___ 27. I usually discuss my problems and concerns with my partner.
- ___ 28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.
- ___ 29. I feel comfortable depending on romantic partners.
- ___ 30. I get frustrated when my partner is not around as much as I would like.
- ___ 31. I don't mind asking romantic partners for comfort, advice, or help.
- ___ 32. I get frustrated if romantic partners are not available when I need them.
- ___ 33. It helps to turn to my romantic partner in times of need.
- ___ 34. When romantic partners disapprove of me, I feel really bad about myself.
- ___ 35. I turn to my partner for many things, including comfort and reassurance.
- ___ 36. I resent it when my partner spends time away from me.

P-AASQ

When reference is made to “mother” I will be thinking of my:

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P-AASQ

The items on this page refer to your relationship with your father. If you have more than one person who could be classified as your father, think about the person with whom you have had the most contact over the course of your life.

When reference is made to "father" I will be thinking of my:

1. biological father
2. stepfather
3. adoptive father
4. foster father
5. other _____

Directions: Read each paragraph below and then, using the scale provided below, choose a number from 1 to 7 to rate how descriptive each paragraph is of your relationship with your father.

Scale:	1	2	3	4	5	6	7
	not at all descriptive					extremely descriptive	

	<u>Rate Each</u> <u>(Scale of 1-7)</u>	<u>Most Descriptive</u> <u>(Check one only)</u>
1. It is easy for me to become emotionally close to my father. I am comfortable depending on him and having him depend on me. I don't worry about being abandoned by him or having him not accept me.....	_____	_____
2. I am comfortable with <u>not</u> having a close relationship with my father. It is very important for me to feel independent from him and self-sufficient, and I prefer not to depend on him or have him depend on me.....	_____	_____
3. I want an emotionally close relationship with my father, but I often find that he is reluctant to get as close as I would like. I am uncomfortable being without a close relationship with him and I sometimes worry that he doesn't value me as much as I value him.....	_____	_____
4. I am uncomfortable getting close to my father. I want an emotionally close relationship with him, but I find it difficult to trust him completely or to depend on her. I worry that I will be hurt if I allow myself to become too close to him.....	_____	_____

Appendix E

PLEASE INDICATE HOW OFTEN YOU EXPERIENCE THE FOLLOWING THINGS WITH MEMBERS OF YOUR FAMILY OF ORIGIN. KEEP IN MIND THERE ARE NO CORRECT ANSWERS. PLEASE CIRCLE THE BEST ANSWER. REMEMBER, THESE QUESTIONS PERTAIN TO YOUR FAMILY OF ORIGIN.

RESPONSE CHOICES						
1	2	3	4	5	6	7
Never			Sometimes			Always
1. I feel upset when family members do not approve of people I am intimate with.						
1	2	3	4	5	6	7
2. I feel guilty about continuing a relationship with someone family members do not like.						
1	2	3	4	5	6	7
3. When I am told that a family member disapproves of something I have done, I feel obligated to change what I am doing.						
1	2	3	4	5	6	7
4. I rely on family members' approval to let me know I am doing things right.						
1	2	3	4	5	6	7
5. I feel obligated to spend time with family.						
1	2	3	4	5	6	7
6. If I did not follow advice that a family member offered, I would feel guilty.						
1	2	3	4	5	6	7
7. I feel guilty when I do not take the side of a family member in a disagreement with others.						
1	2	3	4	5	6	7
8. When family members ask me to do certain things, I feel guilty when I have to say no.						
1	2	3	4	5	6	7
9. I become upset when family members criticize my behavior.						
1	2	3	4	5	6	7
10. I ask whether or not family members approve of people I am intimate with.						
1	2	3	4	5	6	7
11. I feel obligated to stop associating with friends my family members do not like.						
1	2	3	4	5	6	7

RESPONSE CHOICES

1	2	3	4	5	6	7
Never			Sometimes			Always

12. When I am told I have done something which hurt other family members I feel guilty.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

13. I become upset at the thought of telling a family member they are interfering in my life.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

14. There are certain things I do for members of my family because I have an obligation to.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

15. I choose friends that family members will like and feel comfortable with.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

16. Family members help me pay for large transportation costs (bus, airfare, etc.)

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

17. I pay for my own clothing.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

18. Family members help me pay for major life expenses.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

19. Family members give me money to spend on pleasurable things for myself.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

20. Family members help me pay for necessary purchases.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

21. Family members buy me things I need but have not yet bought myself.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

22. I pay for my own car expenses.

1	2	3	4	5	6	7
----------	----------	----------	----------	----------	----------	----------

RESPONSE CHOICES						
1	2	3	4	5	6	7
Never			Sometimes			Always
23. I am able to borrow money from family members when I am short of cash.						
1	2	3	4	5	6	7
24. Family members watch T.V. and go to the movies with me.						
1	2	3	4	5	6	7
25. I am involved in hobbies (fishing, sewing, gardening) with family members.						
1	2	3	4	5	6	7
26. Family members spend leisure time with me doing nothing in particular.						
1	2	3	4	5	6	7
27. I help family members with everyday household duties and cleaning.						
1	2	3	4	5	6	7
28. I help family members with chores and tasks (home, and auto repair, moving, etc.).						
1	2	3	4	5	6	7
29. Family members are involved in sports and recreational activities with me.						
1	2	3	4	5	6	7
30. I take vacations with members of my family.						
1	2	3	4	5	6	7
31. I ask for family members' advice when I am dealing with difficulties.						
1	2	3	4	5	6	7

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