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## Long-term adjustment and the role of attachment among Holocaust child survivors

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### Abstract

This study examines the long-term adjustment of child survivors of the Nazi Holocaust and the role of attachment among treated and untreated Holocaust survivors. The findings show that both treated and untreated survivors reported significantly higher levels of post-traumatic residues than the non-Holocaust controls, while the treated survivors reported higher levels than the untreated ones. Treated survivors also differed from the other two groups in their levels of avoidant and anxious-ambivalent characteristics and fear of intimacy and from the control group in the level of the secure attachment dimension. The findings of the study emphasize the lasting impact of the Holocaust on the child survivors and is consistent with the clinical and empirical literature on child survivors of the Holocaust. The findings also demonstrate the wide variability among the Holocaust survivors and the contribution of attachment to the long term adjustment of the survivors. © 2002 Elsevier Science Ltd. All rights reserved.

**Keywords:** Child Holocaust survivors; Long-term emotional adjustment; PTSD

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### 1. Introduction

Children who survived the Holocaust were repeatedly exposed during their most formative years to horrific cruelty, torture, and starvation. Many of them witnessed massive death and destruction. Most of them lost family, friends, home, and belongings. Prematurely deprived of the security and innocence of childhood, they saw their communities disintegrate and their social structures collapse.

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These gruesome experiences left deep and enduring psychological scars on many of these child survivors. There is considerable evidence, both clinical and empirical, that child survivors constitute a high-risk group for psychopathology and adjustment problems, manifested in clinical and sub-clinical depression (Robinson, Rapaport-Bar-Sever, & Rapaport, 1994), anxiety (Haber, 1988), somatization (Gampel, 1988), and PTSD (Kellermann, 1999; Valent, 1995), loss of identity and low self-esteem (Kestenberg, 1992), difficulty expressing anger, and impaired ability to create and maintain close and stable interpersonal relationships (Gampel, 1988).

The evidence supporting the view that child survivors constitute a high-risk group is not unequivocal, however. It has been argued that these negative findings stem from biased sampling (Leon, Butcher, Kleinman, Goldberg, & Almagor, 1981). The studies of this population are relatively few in number and most consist of case analyses and clinical impressions, and most utilize clinical samples without controls (Harel, 1982). In fact, both clinicians and researchers present evidence showing that many child survivors of the Holocaust have demonstrated impressive recuperative power, as manifested in their ability to manage normal and creative lives and to accomplish a variety of psychosocial tasks (Krell, 1993; Leon et al., 1981; Orenstein, 1981).

Given this apparent variability in the long-term adjustment of the child survivors, as that of survivors of other catastrophes (e.g. Solomon, 1993), another question that arises is why some survivors adjust better than others. Scholars who have addressed these questions have pointed to the importance of situational factors, such as whether the children were in hiding or in camps, whether and when they were separated from their parents, and other factors (e.g. Eitinger, 1963; Davidson, 1992). Another possibility is that the variability may be accounted for, at least in part, by pre-existing personality features. One such feature may be attachment style.

### *1.1. Attachment style, adjustment to stress, and capacity for intimacy*

Attachment theory holds that the nature and quality of early interactions with the primary caregiver establishes the basis for subsequent interpersonal behavior (Bowlby, 1973). Subsequent scholars have identified three attachment styles: secure, anxious-ambivalent, and avoidant—the last two being insecure styles (Ainsworth, Blehar, Waters, & Wall, 1978). Briefly stated, secure attachment is characterized by comfort with closeness and separateness, avoidant attachment by distance and excessive self-reliance, and anxious-ambivalent attachment by the seeking of contact and inability to endure even short periods of separation (Collins & Read, 1990; Hazan & Shaver, 1987; Mikulincer & Erev, 1991).

Researchers and theoreticians have suggested that a person's attachment style affects the way in which he or she copes with stress. Secure attachment, it has been argued, is an inner resource that facilitates adjustment and improves well-being in adverse situations. Findings show that secure persons perceive themselves in a positive and coherent way, possess good problem solving skills, tend to view stressful situations optimistically, and believe that others will help them in time of need. These qualities enable them to confront stress with a sense of mastery, to choose effective coping strategies, and to make use of social support in stressful situations (Mikulincer & Florian, 1998). Several studies provide evidence that secure attachment buffers the detrimental psychological effects even of traumatic stressors, such as missile attacks (Mikulincer, Florian, & Weller, 1993), extreme life-endangering conditions (Mikulincer, Horesh, Eilati, & Kotler, 1999), military

combat (Dekel, Solomon, Ginzburg, & Neria, submitted for publication), and captivity (Solomon, Ginzburg, Mikulincer, Neria, & Ohry, 1998).

Insecure attachment, in contrast, is viewed as a risk factor that may detract from the individual's resilience in times of stress. Individuals with an insecure attachment style, it has been shown, have less confidence in their ability to cope with difficulties, have poorer problem solving skills, view difficult situations as less controllable and more threatening, and tend to distrust others—leading them to be more anxious, hostile, and distressed in stressful situations (Kobak & Sceery, 1988; Shaver & Hazan, 1993).

Attachment style has also been associated with the ability for long-standing intimate relationships in adulthood. According to Bowlby, the nature of the attachment relationship the infant forms with its primary caregiver is internalized as a working model which determines the nature of his or her adult relationships (Bowlby, 1980, 1988). Findings show that persons with a secure attachment style have greater capacity for intimacy (Collins & Read, 1990; Feeney & Noller, 1996; Simpson, 1990), while persons with either of the insecure attachment styles tend to be less satisfied with their relationships (Priel & Shamai, 1995). Anxious-ambivalent individuals tend to feel threatened by separateness and autonomy and deeply fear abandonment (Collins & Read, 1990; Hazan & Shaver, 1994; Jones & Cunningham, 1996), and avoidant individuals have fewer and shorter couple relationships (Kobak & Sceery, 1988).

The present study examines the vulnerability of child survivors of the Holocaust using a research design that compares the long term adjustment of treated child survivors, untreated child survivors, and a control group of Israelis who had not gone through the Holocaust. We hypothesize that the three groups will differ in the long-term psychological outcomes: the treated will have the worst condition, the untreated will be in the middle and the controls will be the best. In addition, the study examines the possible contribution of attachment styles to the adjustment of the three groups. We hypothesize that the Holocaust survivors will be highly characterized with anxious and avoidant styles and lower levels of secure attachment compared to the controls. Moreover, we want to examine whether attachment styles moderate the differences between the groups in the long-term psychological measures.

## 2. Method

### 2.1. Subjects and procedure

The sample consists of three groups: a treated child survivor group, an untreated child survivor group, and a non-survivor control group.

The treated child survivor group consisted of 43 Holocaust survivors who were treated in AMCHA (Israeli Association for Psychosocial Support of Holocaust Survivors and the Second Generation). None had a psychosis. Subjects in this group were approached through their therapists. Subjects who initially consented to participate in the study received and returned the questionnaires by mail. Their response rate was 80%.

The untreated child survivor group consisted of 48 subjects who also went through the Holocaust as children but who did not seek professional help. These subjects were located from the records of the “Yad Vashem” Memorial Institute of the Holocaust and Holocaust Survivors in

Israel and from the list of attendants at the First Conference of Child Survivors held in Israel. The response rate was 94%; 4% of the returned questionnaires were not fully completed and they were excluded from the study.

$\chi^2$  test revealed no significant group differences in the type of main exposure during the Holocaust ( $\chi^2=0.63$ ; d.f. = 1 NS); 28.6% of the subjects of the two groups were in a concentration camp; 71.4% stayed in a hiding place.

The control group consisted of 43 Israeli born subjects who had not gone through the Holocaust. These subjects were recruited with the help of the Holocaust survivors in the other groups, who were asked to locate friends willing to participate in the study. Potential subjects received questionnaires through the mail and 85% of them responded.

Table 1 presents the socio-demographic data on the three groups. Half or more of the subjects in all three groups were women, most of them married, and their ages ranged from 50 to 70 years (mean age was 60 years) at the time of the study. Significant group differences were found only in education and employment. Thirty percent of the treated child survivors had a university education, as opposed to 40% of the untreated survivors, and 74% of the control group. Along similar lines, fewer than half the treated survivors were employed, as opposed to 71% of the untreated survivors, and 93% of the control group. These differences in socio-demographic variables were addressed in the data analysis.

## 2.2. Measures

### 2.2.1. PTSD inventory

The PTSD inventory is a self-report scale based on DSM-III-R criteria. This questionnaire consists of 17 statements corresponding to the 17 PTSD symptoms. Subjects were asked to indicate whether or not they had experienced any of the symptoms in the previous month. The intensity of post-traumatic symptomatology was gauged by the number of symptoms endorsed.

Internal consistency among the 17 items in the current sample was high (Cronbach alpha = 0.89). The scale was found to have a high convergent validity when compared with diagnoses based on structured clinical interviews (Solomon, Benbenishty, Neria, Abramowitz, Ginzburg, & Ohry, 1993).

### 2.2.2. Impact of event scale (IES)

The IES was devised by Horowitz, Wilner, and Alvarez (1979) to assess the emotional sequelae of extreme stress. The questionnaire describes 15 trauma related emotional reactions, tapping intrusion and avoidance. Respondents were asked to indicate on a 4-point scale ranging from "not at all" to "often" how frequently they experienced each reaction during the previous week. A general score was computed as the mean of all the items. The IES is a widely used measure with validated psychometric properties (Hendrix, Jurich, & Schumm, 1994; Neal, Busuttil, Herepath et al., 1994). Previous studies indicate high validity and reliability of the Hebrew version (Schwarzwald, Solomon, Weisenberg, & Mikulincer, 1987).

### 2.2.3. Fear of close personal relationships questionnaire (FCPRQ)

This questionnaire was developed by Sheehan (1989) on the basis of Feldman's theory (1979) of marital intimacy. Feldman named five types of fear of intimacy, each stemming from a specific underlying problem: (1) Fear of merger, of loosing one's individuality within the dyadic

relationship, which is prominent among people with a weak sense of self. (2) Fear of exposure exhibited especially by people with low self-esteem and self acceptance. (3) Fear of attack, which occurs when personal relations are associated with fears stemming from early developmental stages. (4) Fear of abandonment, typical of people who experienced traumatic separations and formed an unconscious association between intimacy and loss. (5) Fear of one's own destructive impulses, in which unresolved childhood anxieties stand in the way of adult intimate relations. A general score was computed as the mean of all the items. Subjects were asked to indicate how frequently they showed each behavior in their current or last intimate relationship on a 5-point Likert scale. Cronbach alphas were good (0.57–0.78) for all five types of fear (0.89).

#### 2.2.4. Attachment

Attachment styles were assessed via a questionnaire developed by Mikulincer and his colleagues (Mikulincer & Erev, 1991; Mikulincer, Florian, & Tolmacz, 1990) based on Hazan and Shaver's (1987) descriptions of three attachment styles—secure, avoidant, and anxious ambivalent. Subjects received 15 statements, five items for each attachment style (e.g. forming social ties is easy for me. I feel uneasy in the presence of others). Subjects were asked to state the extent to which each statement applied to them, on a 7-point Likert scale ranging from 0 = not at all to 7 = very much. Each subject received three scores, consisting of the average of the items corresponding to each attachment style.

Cronbach alphas for the three styles indicate moderate reliability (secure, 0.51; avoidant, 0.75; anxious ambivalent, 0.63).

Table 1  
Distribution of socio demographic variables by research groups

	Treated child survivors n (%)	Untreated child survivor n (%)	Control group n (%)	
<i>Gender</i>				
Male	16 (37)	24 (50)	22 (51)	$\chi^2 = 2.1$ ; d.f. = 2
Female	27 (63)	24 (50)	21 (49)	
<i>Family status</i>				
Married	33 (77)	45 (94)	36 (86)	$\chi^2 = 5.36$ ; d.f. = 2
Unmarried	10 (23)	3 (6)	6 (14)	
<i>Education</i>				
Elementary school	7 (16)	8 (17)	1 (2)	$\chi^2 = 32.74***$ ; d.f. = 6
High school	11 (27)	10 (21)	8 (19)	
Professional	13 (30)	11 (23)	2 (5)	
Academic	12 (28)	19 (40)	32 (74)	
<i>Occupational status</i>				
Work	20 (48)	34 (71)	40 (93)	$\chi^2 = 21.14***$ ; d.f. = 2
Does not work	22 (52)	14 (29)	3 (7)	

\*\*\*  $P < 0.001$ .

### 3. Results

To find whether the groups differed in the attachment and the long-term adjustment, two MANOVA analyses were performed. In the first analysis, the dependent variables were the three attachment dimensions (secure, anxious and avoidant), and in the second, the long term outcome measures (posttraumatic symptoms, IES score, and fear of intimacy). Since the groups differed in occupational status and level of education, both analyses included these measures as covariates. The MANOVAs yielded significant main effects for both attachment [ $F(6,250)=4.49; P<0.001$ ] and long term adjustment [ $F(6,246)=7.86; P<0.001$ ]. Table 2 presents means and standard deviations of the three attachment dimensions, posttraumatic symptoms, IES score, and fear of intimacy score according to research group.

Univariate analyses, followed by Scheffe contrasts were performed to ascertain the source of the group differences. These analyses revealed the following pattern of results: first, the treated Holocaust survivors had higher scores in anxious and avoidant attachment than the two other groups, and lower secure scores than the controls. Second, treated child survivors endorsed the highest level of distress as manifested in the number of PTSD symptoms, and general IES score, the untreated child survivors were in the middle, and the controls endorsed the least distress. Finally, treated Holocaust survivors reported more fears of intimacy than the two other groups.

Finally, a series of hierarchical regression analyses were performed to examine the relative, unique contribution of group, background variables, and attachment style to posttraumatic symptoms, total IES score, and fear of intimacy. The variables were entered in chronological order starting with the groups, which were forced to enter as two demi-variables (Holocaust versus non-Holocaust; treated versus non-treated survivors). This was followed by background variables (age, gender, education, marital status, and employment). In the third step the three attachment styles (secure, avoidant and anxious/ambivalent) were entered. Lastly, in order to check the moderator effect of the attachment styles the interactions between attachment styles and research groups were entered.

Table 3 presents the significant Beta coefficients and the amount of variance explained by each of the independent variables for the three dependent variables.

Table 2  
Attachment scores and outcome measures according to study group

	Treated child survivors	Untreated child survivor	Control group	
	<i>M</i> (S.D.)	<i>M</i> (S.D.)	<i>M</i> (S.D.)	
Secure	4.21 (1.06)	4.68 (1.23)	4.84 (0.86)	$F(2,127)=2.95*$
Anxious	3.70 (1.26)	2.58 (0.91)	3.01 (0.84)	$F(2,127)=4.79**$
Avoidant	4.12 (1.37)	3.31 (1.29)	3.13 (1.14)	$F(2,127)=11.10***$
PTSD symptoms	0.49 (0.25)	0.28 (0.28)	0.15 (0.20)	$F(2,126)=11.19***$
IES	2.81 (1.39)	2.06 (1.29)	1.22 (1.09)	$F(2,131)=9.36***$
Fear of intimacy	2.71 (0.52)	2.22 (0.38)	2.19 (0.41)	$F(2,125)=17.60***$

\*  $P<0.05$ .

\*\*  $P<0.01$ .

\*\*\*  $P<0.001$ .

*Post-traumatic symptoms:* 41.8% of the variance in PTSD symptoms was explained by the independent variables [ $F(6,122)=14.63; P<0.001$ ]. The study groups contributed 24.3% to the explained variance and demonstrated the effect of both exposure to the Holocaust (as reflected in the demi variable of Group 1) and of seeking professional help (as represented by the demi variable of Group 2). Both treated and non-treated survivors reported significantly higher rates of post-traumatic symptoms than the controls, while treated survivors had significantly more symptoms than the untreated ones. Background variables contributed 3.4% to the explained variance. The higher the education, the fewer the symptoms. Attachment style contributed 8.5%

Table 3  
Regression  $\beta$  coefficients and amount of variance explained by predictors according to outcome variables

	PTSD		IES		Fears of intimacy	
	Beta	$R^2$ change	Beta	$R^2$ change	Beta	$R^2$ change
<i>Step I:</i>						
Group1	0.36***		0.26**		0.47***	
Group2	-0.21*	24.32%	-0.28**	21.09%	-0.04	23.4%
<i>Step II:</i>						
Group1	0.35***		0.24**		0.47***	
Group2	-0.15		-0.16		-0.04	
Gender	-		0.23**		-	
Age	-		0.21*		-	
Education	-0.20*	3.4%	-	6.8%	-	20.4%
<i>Step III:</i>						
Group1	0.26**		0.17*		0.22**	
Group 2	-0.15		-0.15		-0.05	
Gender	-		0.21**		-	
Age	-		0.21*		-	
Education	-0.15		-		-	
Avoidant style	0.31***		0.24**		0.40***	
Anxious style	-		-		0.20**	
Secure style	-	8.5%	-	5.1%	-0.17*	30.15%
<i>Step IV:</i>						
Group1	0.31***		0.17*		0.19*	
Group2	-0.19		-0.15		-0.05	
Gender	-		0.21**		-	
Age	-		0.21*		-	
Education	-0.09*		-		-	
Avoidant style	0.32***		0.24**		0.40***	
Anxious style	-		-		0.17*	
Secure style	-		-		-0.18**	
Gr1XEducation	0.23**					
Gr2XEducation	0.22*	5.6%				
Gr1Xsecure style					-0.23***	5.2%
Total $R^2$		41.8%		33.08%		58.80%

\*  $P<0.05$ .

\*\*  $P<0.01$ .

\*\*\*  $P<0.001$ .

to the explained variance. Only the avoidant style, however, made a significant contribution. Avoidant subjects suffered from more post-traumatic symptoms than secure and anxious ambivalent subjects. The interactions between education and group contributed 5.6% to the explained variance in post-traumatic symptoms. Significant contributions were found for both the interactions between education and exposure to the Holocaust and between education and help seeking.

In order to understand the meaning of the interactions we separately examined the correlations between education and PTSD in each of the study groups. A significant correlation was found only among the untreated Holocaust survivors ( $r = -0.48$ ;  $P < 0.001$ ). Results indicate that within this group, subjects with low levels of education reported high rates of posttraumatic symptoms. No significant relation was found between education and posttraumatic symptoms in the other two study groups.

*IES:* 33.08% of the variance in the total IES score was explained by the independent variables [ $F(5,123) = 12.16$ ;  $P < 0.001$ ]. Study group contributed 21.1% to the explained variance and demonstrated the effect of both exposure to the Holocaust (Group1) and seeking professional help (Group2). Both treated and non-treated survivors reported significantly higher levels of intrusion and avoidance symptoms than the controls, while treated survivors had significantly more symptoms than the untreated ones.

Background variables contributed 6.8% to the explained variance. Women and older subjects suffered from higher levels of intrusive and avoidant tendencies. Attachment style contributed 5.1% to the explained variance. As with PTSD symptoms, only the avoidant style made a significant contribution. Avoidant subjects suffered from more intrusive and avoidant tendencies than secure and anxious ambivalent subjects.

*Fear of intimacy:* 58.80% of the variance in fear of intimacy was explained by the independent variables [ $F(6,122) = 29.02$ ;  $P < 0.0001$ ]. Study group contributed 23.4% to the explained variance. However, the significant contribution was made only by help seeking. Treated survivors exhibited greater fear of intimacy than untreated ones. Background variables made no unique contribution to fear of intimacy. Attachment style made the greatest contribution (30.15%): the more avoidant and anxious and the less secure the attachment style, the stronger the subject's fear of intimacy. The interactions contributed 5.2% to the explained variance. The only significant contribution, however, was made by the interaction between secure attachment and therapy. Correlations calculated to understand the meaning of the interaction revealed a significant negative association between secure attachment style and fear of intimacy in the treated group ( $r = -0.66$ ;  $P < 0.01$ ), but not in the untreated group ( $r = -0.17$ ).

#### **4. Discussion**

The findings of this current study emphasize the lasting impact of the Holocaust on the child survivors. The findings are more complicated than we hypothesized: both treated and untreated survivors reported significantly higher levels of post-traumatic residues than the controls. This is consistent with the clinical and empirical literature on child survivors of the Holocaust (Dasberg, 1992; Dor-Shav, 1978; Eitinger, 1963).

The findings also demonstrate a variability among the survivors: the treated survivors reported a higher level of post-traumatic residues as well as more intense and widespread fear of intimacy

than both the non-treated survivors and the control group. These findings can be interpreted in either of two ways.

One is that the treated survivors sustained more serious psychological injuries than the untreated ones and that their elevated levels of distress motivated them to seek professional help. This explanation is supported by the studies of child Holocaust survivors based on clinical impressions and clinical samples, which show these particular survivors to be at high-risk for psychopathology and adjustment problems (Moskovitz & Krell, 1990; Robinson et al., 1994; Tauber, 1996). It also receives support from studies of traumatized war veterans, that have shown that those who seek treatment reported higher levels of pre-treatment symptoms than those who do not seek treatment (Solomon, Benbenishty, Waysman, & Bleich, 1994).

The other possible explanation is that the greater report of distress observed among the treated survivors is not an antecedent of treatment but rather a result. Treated survivors may have become more aware of and more able to admit and report their problems. This interpretation is supported by a treatment outcome evaluation among PTSD veterans which showed that after the intervention the treated group exhibited more severe psychiatric symptomatology than they had prior to the intervention, as well as more severe symptomatology than a control group of untreated veterans with similar base levels of symptomatology (Spiro, Shalev, Solomon, & Kotler, 1989).

With regard to attachment, the findings show that treated survivors had lower levels of secure attachment characteristics and higher levels of avoidant or anxious-ambivalent characteristics than either the controls or the untreated survivors. The high level of insecure attachment dimensions among the treated survivors suggests that the vulnerability of those who sought treatment is not limited to emotional distress, but extends to a basic personality feature. Whether the vulnerability preceded or followed their Holocaust experience, however, cannot be known. For the most part, the literature views attachment style as a stable personality feature, formed in infancy and early childhood, and resistant to subsequent change (Feeney & Noller, 1996; Klohen & Bera, 1998; Levy, Blatt, & Shaver, 1998). This view, however, has recently been challenged, and various researchers have presented findings pointing to the instability of attachment style over time (Baldwin & Fehr, 1995). Possibly, insecure attachment is one of the many after-effects of the traumatic experience of the Holocaust among child survivors, especially since most of them had been violently torn away from their parents early in life. Davidson (1980) contends that this experience undermined the basic trust of child survivors and impaired their ability to form a secure attachment.

The regression analyses revealed the salient and the direct contribution of the avoidant characteristics to stress residues. Subjects characterized as highly avoidant suffered from more post-traumatic symptoms and more intrusive and avoidant tendencies than secure and anxious-ambivalent subjects. These results are consistent with previous reports among former combatants (Dekel, 1999) and citizens exposed to extreme life endangering conditions (Mikulincer et al., 1999), demonstrating the vulnerability of avoidant persons. It seems that when confronted by stressful circumstances, the avoidant individuals' 'pseudo-safe' world is shattered. Overwhelmed by their negative emotions and thoughts, these individuals' coping skills are undermined, leaving them vulnerable and helpless (Mikulincer et al., 1999).

In addition, only the secure attachment style had a moderating effect on fears of intimacy. Among the treated group, secure style was negatively associated with fears of intimacy. Since we

know that the level of fears of intimacy is highest among this group, this finding is consistent with earlier findings and strengthens the contribution of the secure style to cope in highly stressful situations (Mikulincer et al., 1999).

Background variables made a relatively small contribution to the differences among the study groups. The strongest contribution was made by education. The higher the education, the fewer the post-traumatic symptoms. This finding is consistent with other studies which similarly showed that education improves adjustment to stress (Menaghan, 1983; Neria, Solomon, & Dekel, 2000). On the other hand, since many child survivors continued their schooling after the Holocaust, perhaps the level of emotional adjustment affected the level of education the survivors attained.

This study has several limitations. The three convenience samples were relatively small so we cannot assure their representation and this limits the generalizability of the findings. Moreover, the scope of the study made it impossible to include the specifics of the survivors' Holocaust experiences, as well as other experiences both preceding and following the Holocaust which may have had an impact on their adjustment. There are also some problems with the exploration of attachment style. The inevitably retrospective nature of the study makes it impossible to know whether the subjects' attachment styles preceded their Holocaust experience or were developed as a result of it. In addition, there is a certain confounding between the concept of attachment style in which the capacity for intimacy is a crucial dimension and fear of intimacy as a dependent variable.

Nonetheless, this study contributes to the small body of empirical research on the long-term adjustment of child Holocaust survivors, considering both treated and untreated individuals. The findings support the wide variability in adjustment among the child survivors as well as the important role of attachment style in responses to stress. Further study is recommended on larger samples of child survivors. Research is also recommended into stability of attachment style and the underlying mechanisms by which it affects adjustment.

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