The Implication of Combat-Induced Stress Reaction, PTSD, and Attachment in Parenting Among War Veterans

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This study examined parental functioning, parental satisfaction, and concern for offspring during their child’s military service, among war veterans, some of whom suffered from acute combat-induced stress reaction (CSR) and posttraumatic stress disorder (PTSD). In addition, we examined the additive and interactive contributions of CSR, PTSD and attachment dimensions to parenting measures. The sample consisted of 477 participants divided into two groups: a clinical group of veterans who had been diagnosed with CSR on the battlefield (N = 267), and a matched control group of veterans who did not suffer from CSR (NCSR; N = 210). CSR, PTSD, avoidant-attachment, and anxious-attachment, were all related to lower levels of parental functioning and satisfaction. Veterans who suffered from both CSR and PTSD reported more concern for their offspring during their child’s military service compared to veterans with PTSD but without antecedent CSR. Attachment dimensions and specifically attachment-avoidance, made the greatest contribution to parenting measures, followed by posttraumatic symptoms. In addition, attachment-avoidance moderated the relationship between posttraumatic symptoms and parental functioning. Theoretical and clinical implications of these results are discussed.

Keywords: family, CSR, PTSD, attachment and parenting

Parenting is an important role taken on by most adults and is characterized by constant change depending on the developmental stage of the children. Parenting is also a complex and multifaceted role influenced by a variety of internal (i.e., personality) and external (i.e., life-events) factors. Until the mid-1970s, most studies focused on mothers and only gradually has this trend changed, with a greater interest in the parental role of fathers (Lamb & Oppenheim, 1989). A significant body of research indicates that mothers’ mental health has a significant impact on a variety of parenting domains. More recently, fathers’ mental state has also been implicated in their parenting skills and satisfaction (e.g., Belsky, 1993).

A few studies have reported that fathers with stable mental health show higher involvement in child rearing (Flouri & Buchanan, 2003), while depressed fathers were found to function in a destructive and neglectful way (Simmons, Lorenz, Wu & Conger, 1993). Furthermore, fathers characterized by high levels of autonomy found the transition into fatherhood to be easier and derived higher levels of satisfaction from parenting (Kernstein, 1996). It is interesting that fatherhood among men who have suffered from war-induced psychopathology has received limited scientific attention (Ruscio, Weathers, King, & King, 2002). Given the high prevalence of war-induced psychopathology among male veterans there is a dire need to fill this gap in knowledge. This study aimed to undertake this task.

It is now well established that combat can cause emotional distress and psychopathology. Some pathological reactions to war are acute and occur on the battlefield or in the immediate aftermath of combat. The most common of these acute stress reactions is combat stress reaction (CSR). This condition results from psychological breakdown on the battlefield when a soldier feels unable to marshal effective coping mechanisms to deal with both internal and external pressures and is flooded with anxiety. CSR symptoms are not uniform, but include labile polymorphic manifestations such as restlessness, psychomotor retardation, withdrawal, startle reactions, confusion, and paranoid reactions. Despite the extreme variability of this phenomenon, militaries the world over have identified a common denominator: severe functional impairment.

CSR shares some characteristics with acute stress reaction (ASR; International Classification of Diseases 10th rev. [ICD–10]; World Health Organization, 1992), such as...
the phenomenology of immediate responses to trauma and the short duration. CSR also share some characteristics with acute stress disorder (ASD; Diagnostic and Statistical Manual of Mental Disorders (4th ed., text revision [DSM–IV–TR]; American Psychiatric Association, 2000), such as the functional impairment and the predictive value for chronic psychopathology such as PTSD (e.g., Solomon & Mikulincer, 2006). Beyond the common properties, different studies show the unique characteristics of CSR such as the significant impact on veterans’ self-esteem and the pervasive, long-standing impact on their mental and physical health and global functioning (for extensive review please see Isserlin, Zerach, & Solomon, 2009). CSR is also considered a major risk factor for PTSD which is the most common and conspicuous war-induced chronic psychopathology (Hoge & Castro, 2006).

PTSD is characterized by reexperiencing the traumatic event, avoidance of stimuli associated with the trauma, numbing of general responsiveness, and hyperarousal. The relationship between combat exposure and PTSD has been consistently well documented, including in recent conflicts in Afghanistan and Iraq. For example, nearly 1.8 million U.S. service members have now served in Afghanistan or Iraq in support of Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF). Between 31% to 86% were exposed to firefights and the estimated prevalence of PTSD among U.S. Iraq War veterans exceeds 12% among recently returned service members (Hoge et al., 2004) and 16% in soldiers assessed one year after return from Iraq (Hoge & Castro, 2006). Combined samples of U.S. service members deployed to Iraq or Afghanistan revealed estimated PTSD rates of 14% (Tanielian & Jaycox, 2008).

The detrimental effects of war are not limited to the traumatized veterans, but also have aversive effects on the traumatized veterans’ family. A consistent body of research suggests that posttraumatic stress symptoms largely account for the relationship between war exposure, and familial and marital maladjustment (e.g., Sayers, Farrow, Ross, & Oslin, 2009). Studies indicate that traumatized veterans often experience difficulties with intimacy and marital communication (Cook, Thompson, Riggs, Coyne, & Sheikh, 2004), outbursts of rage and aggression, lower marital satisfaction and stability (Nelson-Goff, Crow, Reisbig, & Hamilton, 2007). It is interesting that parenting of traumatized veterans has received limited empirical attention. Most studies on this topic are based on clinical observations which suggest that posttraumatic symptoms compromise a veteran’s ability to function as a father and to be satisfied in his parental role (Berz, Taft, Watkins, & Monson, 2008).

It was found that the relationships between the traumatized veterans and their children were often characterized by entanglement, control, fusion, and overprotectiveness. In line with family stress theory, it may be assumed that when family members witness the father’s difficulties in regaining his former family roles returning from war, they may react with resentment and destabilization of familial borders. This, in turn, may further undermine fathers’ perception of their parental functioning and the satisfaction from their role as a parent (Boss & Couden, 2002). It was also suggested that over the years, CSR veterans continue to have difficulties trusting their capabilities as husbands and fathers, in part due to the shattering of their masculine identity during combat (Solomon, 1993). Furthermore, clinicians and researchers have suggested that the difficulties experienced by the traumatized veterans in parental functioning stem from hyperarousal, avoidance, and specifically, emotional numbing symptoms (e.g., Ruscio et al., 2002).

One of the significant parenting hurdles for traumatized veterans is coping with situations reminiscent of their own traumatic experiences. Military service of their offspring can thus reactivate and exacerbate their own posttraumatic symptoms. In Israel, mandatory national military service for both genders is part of the development life cycle of an Israeli family. This stage, termed the launching phase, is characterized by a reconfiguration of the physical and emotional bonds between parent and child. At the core of this stage stands a fundamental conflict between affinity and separation (Lahav, 1996).

Israeli parents are usually personally acquainted with the military system. Some parents want their children to continue the “family tradition” of serving in particular units, or to realize their own unfulfilled ambitions (Nemiroff & Colarusso, 1985). In other cases, parents are nervous about the danger their offspring could potentially face, and find their child’s conscription to the military to be difficult. While concern for the child during military service is quite normal, it can be particularly distressing for the traumatized veteran as it can arouse memories of their own difficult experiences in military service.

A factor known to contribute to the parenting experience is the individual’s early relationship with their own parents as manifested in their attachment. Attachment theory holds that the nature and quality of early interactions with the primary caregiver establishes the basis for subsequent interpersonal behavior, including parenting of their own children (Bowlby, 1988). Updated research views adult attachment as a two-dimensional construct: the attachment-avoidance dimension relates to the extent to which one worries that one’s significant other will not be available in times of need and will not meet one’s wishes for proximity and care. The attachment-avoidance dimension refers to the extent to which one does not trust the good intentions of others and wishes to keep oneself emotionally distant (Mikulincer & Shaver, 2007).

Parenting is closely related to attachment (e.g., Adam, Gunnar, & Tanka, 2004). Although adult attachment style mainly refers to the attitudes and behaviors toward romantic partners, it is also manifested in the attitudes toward security and handling provision for offspring. According to Bowlby (1988), attitudes toward parenting are affected mainly by internalized models from childhood, but are also shaped and updated by lifetime experiences. Only a few studies, however, have examined the relationship between attachment orientation and fatherhood. For example, insecure fathers were found to interact less with their children or to be overinvolved in their lives (e.g., Edelstein et al., 2004). Research also found that secure Israeli fathers adapted bet-
ter to their child’s military service and felt less anxious compared to insecure fathers (Wieder, 1997).

To the best of our knowledge, only one unpublished study has specifically examined the relationship between PTSD, attachment, and parenting among young adult offspring of traumatized veterans. This Israeli study found that fathers with PTSD and a secure attachment orientation showed greater parental involvement and lower levels of discipline than traumatized fathers with anxious or avoidant attachment orientations (Ben-Shahar, 2006).

While it is known that insecure attachment may be a vulnerability factor in the development of PTSD (e.g., Mikulincer & Shaver, 2007) and parenting difficulties (Edelstein et al., 2004), this preliminary finding suggests that attachment might moderate the relations between the posttraumatic symptoms and parenting. Findings have shown that individuals with an insecure attachment orientation are less confident in their ability to cope with difficulty and tend to be more anxious, hostile, and distressed in stressful situations (e.g., Hunter, Davis, & Tunstall, 2006). Hence, there is a reason to believe that insecure attachment might lead to poorer parental functioning in the context of trauma-related symptoms.

This study focused on two parallel but distinct aspects of parenting: parental functioning and parental satisfaction. “Parental functioning” refers to the quality of parent–child relationship such as meeting the physical and emotional needs of children, involvement in raising children, use of positive reinforcement, monitoring and supervision and applying discipline (e.g., Collin-Vézina, Cyr, Pauzé, & McDuff, 2005). “Parental satisfaction,” on the other hand, refers to people’s evaluation of their efficacy as parents, the degree to which they enjoyed parenting, their perception of the quality of the parent–child relationship, and the degree of discordance between their expectations and their actual experiences as a parent (e.g., Samper, Taft, King, & King, 2004).

The main research hypotheses for this study were:

1) Veterans who suffered from CSR and PTSD will report lower levels of parental functioning, satisfaction and higher levels of concern for the child during military service, as compared to matched control veterans.

2) Among all veterans, the stronger the characterization of anxious attachment and/or avoidant attachment, the lower the parental functioning, satisfaction, and the higher the concern for the child during military service.

3) Attachment avoidance and anxiety will moderate the relationship between the posttraumatic symptoms and parenting measures: among veterans with higher levels of avoidance or anxiety, the negative relationship between the posttraumatic symptoms and parenting measures will be stronger than among those with lower levels of attachment.

**Method**

**Participants**

This study is part of a longitudinal research comprising of Israeli male combat veterans from the first Lebanon War (for details see Solomon & Mikulincer, 2006). This war was Israel’s longest and most controversial war. It commenced in June 1982 and Israeli soldiers remained in Lebanon, where periodic flare-ups continued to occur, until 2000. Just as with soldiers in other wars, the fighters in Lebanon were exposed to extremely traumatic experiences (i.e., deprivation of basic physical needs and risk of injury and death). Moreover, Israeli soldiers in Lebanon often had to contend with guerrilla tactics such as battles against nonuniformed enemies, including women and children.

Two groups of veterans participated in this study. The first consisted of combatants who were identified by military mental health personnel as CSR casualties. CSR was defined as psychological breakdown on the battlefield, expressed as cognitive, affective, and behavioral symptoms which severely impaired functioning. Inclusion criteria for this group were: a) a referral for psychiatric intervention made by the battalion surgeon during the war; b) a diagnosis of acute CSR made on the battlefield by trained and experienced clinicians; and c) no indication of serious physical injury and/or other psychiatric disorders. The control group (NCSR) included veterans who had fought in the same combat units as the CSR group but had not shown combat stress reaction symptoms. For each CSR casualty, a matched control participant was randomly selected from eligible soldiers who had similar sociodemographic characteristics (age, education, and military rank and assignment).

While it is difficult to control for the subjective stressfulness of any combat experience, the sampling procedure used here ensured that veterans in both groups were exposed to a similar level and type of objective stress. All of the veterans underwent stringent physical and psychiatric screening before commencing their military service, and no indication of diagnosable premorbid symptomatology was recorded. This data retrieved from official military records.

The initial sample in 1983 included 382 CSR veterans and 334 non-CSR veterans. There were no significant differences between the two groups in terms of sociodemographic characteristics (Solomon, 1993). In 2002, these veterans were contacted again, and 267 CSR veterans and 218 non-CSR veterans participated in this wave of measurement (for more detail see Solomon & Mikulincer, 2006). Among them, only veterans with children were included. Hence, the present study includes 477 veterans: 267 CSR veterans and 210 non-CSR veterans. In the second wave there were also no significant differences between the CSR and non-CSR groups in age, marital status, fathers’ country of birth, level of education, and religiosity.

Mean age was 46.9 (SD = 5.76) for the CSR group of veterans and 47.59 (SD = 5.40) for the non-CSR group. The level of education was also similar: 20.6% of the CSR group and 17.2% of the control group were educated up to elementary school level, 56.2% of CSR group and 52.2% of control group had completed high school, and the remainder had higher education. Most participants were married and were still in their first marriage (94.8% of CSR group and 95.2% of control group). According to their reports of religiosity, 57.9% of the CSR group and 52.9% of the control group were secular. Significant differences were
found between the income levels of the CSR and non-CSR groups: more participants in the non-CSR group earned above the mean income level (31.4% vs. 16.8%).

Recruitment and Procedure

In 2002, potential participants were contacted by telephone and the aim of the current study was explained. In the CSR group, 323 veterans were located and 286 of them agreed to participate in the current study (88.5%). In the control group, 258 veterans were located and 218 of them agreed to participate (84.5%). Approval was obtained by both the Israeli Defense Forces (IDF) and the Tel Aviv University IRB committees and participants’ informed consent was obtained. For the 2002 measurement, data were collected at the veterans’ homes by qualified research students that used the measures presented previously. In 2006 the data were collected via telephone interview. In order to collect more extensive data on veterans’ concern for children during military service, at the end of 2006 and the beginning of 2007, we contacted 174 veterans of the total sample whose children served in the IDF during or prior to data collection and asked them questions regarding their child and the nature of their military service.

Measures

PTSD Inventory (Solomon, 1993). The PTSD Inventory was used for the assessment of combat-related PTSD symptomatology. The questionnaire consists of 17 statements describing PTSD symptoms. Respondents were required to rate the frequency of each statement (ranging from “never” to “very often”) that they experienced during the last month. The number of positively endorsed symptoms was calculated by counting the items in which respondents answered “very often” and this symptom count was used to operationalize PTSD both as a continuous variable of number of posttraumatic symptoms and as a dichotomized DSM diagnosis. We operationalize PTSD diagnosis, using DSM–IV–TR symptom criteria (American Psychiatric Association, 2000); that is, at least three out of six problems that are rated positive.

Experiences in Close Relationships Scale (ECR; Brennan, Clark, & Shaver, 1998). The ECR is a 36-item self-reported measure of attachment style in adulthood. It measures attachment on the basis of two superordinate dimensions: anxiety and avoidance. This instrument treats anxiety and avoidance as continuous measures on the grounds that attachment is a continuous, not a categorical concept. That is, as Brennan et al. (1998) claim, that different degrees of security and insecurity exist, rather than a single type or orientation of attachment. It is associated in theoretically predictable ways with measures of attachment-related cognitive processes, emotion-regulatory processes, personal adjustment, and relationship quality (Mikulincer & Shaver, 2007, for a review).

The present study used the Hebrew version of the scale translated by Mikulincer and Florian (2000). As in the original version, half the items target avoidance and half target anxiety. For each item, respondents were asked to rate the degree to which it described their feelings about close relationships on a 7-point scale (1 = strongly disagree; 7 = strongly agree). Scores were calculated as the mean ratings for each dimension. The reliability and validity of these scales have been repeatedly demonstrated (beginning with Brennan et al., 1998; see Mikulincer & Shaver, 2007, for a review). Internal consistency was good (anxiety: $\alpha = .90$; avoidance: $\alpha = .91$).

Kansas Parental Satisfaction Scale (KPSS; Schumm & Hall, 1994). The KPSS was used to assess satisfaction in the parenting role, as well as in the parent—child relationship. The scale includes three items (i.e., how satisfied are you with your children’s behavior, how satisfied are you with yourself as a parent, how satisfied are you with your relationship with your children). A 6-point Likert-type response format was utilized (6 = strongly agree to 1 = strongly disagree). The scale index was calculated as the mean of the three items.

Several studies have investigated internal consistencies of this measure in a variety of populations from different cultures indicating good internal consistencies (e.g., Chang, Schumm, Coulson, Bollman, & Jurich, 1994). The instrument was translated to Hebrew through back translation procedure and was found to have good internal consistency. Internal consistency for the scale in the present study was $\alpha = .90$.

Parental functioning questionnaire. This instrument was specifically developed to assess interpersonal and social functions including parental functioning in posttraumatic casualties of wars in Israel (Dekel, Solomon, & Bleich, 2002). The questionnaire was developed in cooperation with experts in family therapy who treated traumatized veterans. The questionnaire is derived from standard parental questionnaires and has been adapted for use with traumatized veterans. Questions include items relating to the satisfaction of the children’s physical and emotional needs, the father’s involvement in raising children, the degree of cooperation between the partners raising children and the
expressions of physical and verbal violence against children.

A 4-point Likert scale was utilized (4 = strongly agree to
1 = strongly disagree). The index consisted of an average
score of the items, with a higher score indicating better
parental functioning. Earlier studies indicated good internal
consistency (Dekel et al., 2002). The reliability of the
questionnaire in this study was fair (Cronbach’s alpha = .79).

Concern for the child during military service was as-
assessed in the 2002 wave of measurement with two ques-
tions: 1) do you have children who are serving in the IDF?
(yes/no) and 2) What is the degree of your concern? A
3-point Likert-type response format was utilized (1 = not
worried at all to 3 = very worried). These questions were
presented in two versions; regarding children that previ-
ously served in the army, and again with regard to children
currently serving in the army during data collection. Fur-
thermore, we recontacted fathers whose children were serv-
ing in the military in 2006 and asked them questions re-
garding their child and the nature of their military service
(i.e., combat or support units). Due to the high correlation
between the past and present versions of the second ques-
tion, we calculated the mean score for the two 2002 ques-
tions as the index for the fathers’ concern for the child
during military service. The analyses were limited only to
people who said they had children who had previously
served or were currently serving in the IDF.

Data analysis. Data analysis was divided into four
stages. First, we performed chi-square analysis to examine
the distribution of PTSD among the CSR group and the
non-CSR group. Second, we performed multivariate ana-
lysis of variance (MANOVA) and analysis of variance
(ANOVA) analyses to examine differences between the
CSR group and the non-CSR group regarding parental sat-
fisfaction, parental functioning and the fathers’ concern
for their child entering military service. Third, in order to
examine the relationship between attachment dimensions
and parenthood measures, we performed a series of Pearson
correlation analyses. MANOVA and ANOVA analyses ex-
amined the differences in parenthood measures between
veterans with and without PTSD. Finally, to examine the
combined contribution of the independent variables to par-
enthood measures, a four-step hierarchical regression anal-
yses was performed.

Results

Relationship Between CSR and PTSD

As a preliminary analysis we assessed PTSD rates ac-
cording to the DSM–IV–TR criteria among the CSR and
non-CSR groups. A chi-square analysis showed a signifi-
cant relationship between CSR and PTSD, $\chi^2(1) = 28.96$, $p < .001$. Among the CSR Group 35.6% (n = 95) reported
suffering from PTSD. In the non-CSR Group 13.8% (n = 29) endorsed PTSD.

Relationship Between CSR, PTSD, and Parenting

The first hypothesis was that CSR would be associated
with lower levels of parental functioning and parental sat-
fisfaction, and greater concern during the military service
of their sons. It should be noted that the two indices of par-
enthood (‘‘parental functioning’’ and ‘‘parental satisfaction’’)
relate to all study subjects (N = 477), while the third
parental index (‘‘concern for the child during military ser-
vice’’) refers only to subjects whose children served in the
military before or during this study (N = 288).

To test the hypothesis, we performed a MANOVA ana-
lysis for parental functioning and parental satisfaction, and
an ANOVA analysis tested the differences between the
groups regarding the concern of fathers during their off-
spring military service. The first analysis found a significant
difference between the two groups, $F(2, 274) = 12.11$, $p < .001$, $\eta^2 = .05$. The second analysis also found significant
differences between them, $F(1, 284) = 24.23$, $p < .001$, $\eta^2 = .08$. Specifically, the CSR group reported lower
levels of parental functioning, $F(2, 475) = 24.12$, $p < .001$, $\eta^2 = .05$, compared to controls ($M = 3.22$, $SD = 0.51$;
$M = 3.44$, $SD = 0.48$, respectively). Furthermore, CSR
veterans reported lower levels of parental satisfaction, $F(2,
475) = 7.93$, $p < .01$, $\eta^2 = .02$, compared to controls
($M = 4.92$, $SD = 0.97$; $M = 5.16$, $SD = 0.91$, respectively).

Also, CSR veterans reported greater concern during their
sons’ military service, $F(2, 475) = 24.23$, $p < .001$, $\eta^2 = .08$, compared to controls ($M = 2.15$, $SD = 0.69$; $M = 1.75$,
$SD = 0.68$, respectively).

To conclude, there are significant differences between the
two groups in all three parenthood indices. Specifically,
the CSR veterans reported more parenthood difficulties than
the control group. Moreover, the size effect of the concern
for the child during military service was the highest (8%),
followed by parental functioning (5%), and finally parental
satisfaction (2%).

Furthermore, we examined the relationship between
PTSD and the parenting indices above and beyond CSR
diagnosis. We performed analysis of variance of the dichot-
omous measure of PTSD and parenting measures, as mea-
sured at 2002. The MANOVA on parental functioning and
parental satisfaction yielded a significant difference be-
tween the veterans with and without PTSD, $F(2, 472) = 44.25$, $p < .001$, $\eta^2 = .16$.

With regard to the father’s concern for their child during
military service, there was no significant difference between
veterans with and without PTSD, $F(1, 284) = 3.18$, $p > .05$
(see Table 1).

As can be seen in Table 1, veterans with PTSD reported
lower parental functioning and parental satisfaction than
veterans without PTSD. To examine if the differences be-
tween the groups according to PTSD interact with the
diagnosis of CSR we performed a $2 \times 2$ MANOVA
(CSR × PTSD). These analyses revealed no interaction
between those variables with parental functioning and pa-
rental satisfaction as explained variables, $F(2, 472) = 2.26$,
$p > .05$. However, a significant interaction was found
between PTSD and CSR with regard to the father’s concern
for the child during military service, \( F(1, 284) = 6.84, p < .01, \) \( \eta^2 = .02. \) To understand the source of the interaction, simple effects analyses were conducted. Significant differences were found between the CSR group and the control group in both PTSD and NPTSD. However, the effect among veterans with PTSD was larger, \( F(1, 65) = 13.88, p < .001, \) \( \eta^2 = .18, \) than among those without PTSD, \( F(1, 219) = 5.71, p < .05, \) \( \eta^2 = 0.03. \)

Furthermore, in order to rule out alternative answers for the above associations we examined the relationships between the children’s personal background and father’s concern for the child during military service as a function of CSR or PTSD. Of the 288 veterans whose children served in the military, 174 were asked to specify both the gender (son/daughter) and the nature of military service (combat/rear units) of their children. We performed two \( 2 \times 2 \) MANOVA analyses (CSR \( \times \) gender and PTSD \( \times \) gender). Those analyses show a main effect for gender but no significant interactions, showing that father’s reported higher levels of concern for their sons as compared to their daughters, regardless of their CSR or PTSD status.

As for the nature of offspring’s military service, we first performed two \( \chi^2 \) analyses that show no difference in the percentage of offspring who served in combat units as compared to rear units, between CSR and PTSD groups (CSR = 74.4% vs. non-CSR = 78.5%; PTSD = 74.4% vs. no-PTSD = 77%). Next we performed two \( 2 \times 2 \) MANOVA analyses (CSR \( \times \) nature of military service and PTSD \( \times \) nature of military service). Those analyses showed no main effect for nature of military service and no significant interactions.

Relationship Between Attachment Dimensions and Parenting

The second hypothesis was that the stronger the anxious attachment and/or avoidant attachment, the lower the parental functioning and satisfaction, and the higher the concern for the child during military service. As preliminary analyses we found a significant positive Pearson correlation between attachment-avoidance and attachment-anxiety (\( r = .36, p < .000 \)). Furthermore, the study groups differed in attachment dimensions. The CSR group reported significantly higher levels of avoidance (\( M = 3.69, SD = 1.12 \)) than the non-CSR group (\( M = 3.23, SD = 1.02 \)), \( F(1, 474) = 20.85, p < .000 \). CSR group veterans also reported significantly higher levels of anxiety (\( M = 2.75, SD = 1.13 \)) than the non-CSR group (\( M = 2.33, SD = 0.84 \)), \( F(1, 474) = 19.72, p < .000 \).

To test this hypothesis, Pearson correlations were calculated between the attachment dimensions and parenthood indices among the total sample. A significant negative correlation was found between parental functioning and an avoidant attachment (\( r = -.48, p < .001 \)) and between parental functioning and an anxious attachment (\( r = -.31, p < .001 \)). In addition, a significant negative correlation was found between parental satisfaction and an avoidant attachment (\( r = -.49, p < .001 \)), and between parental satisfaction and an anxious attachment (\( r = -.40, p < .001 \)). Finally, a positive correlation was found between anxious attachment and concern for the child during their military service (\( r = .25, p < .001 \)). Therefore, subjects who endorsed more avoidant and/or anxious attachment reported lower parental functioning and parental satisfaction. Regarding the father’s concern for his children during their military service, a positive correlation was found; the more anxious the father’s attachment, the greater concern he reported.

In addition, Pearson correlations were calculated separately for each of the research groups (CSR and NCSR). We also performed Fisher’s Z analysis to compare the different correlations between the groups. The groups differed regarding the correlation between the anxious-attachment and the father’s concern for his children in the military, \( Z = 2.01, p < .05 \). Among CSR group veterans we found a positive correlation, \( r = .27, p < .001 \), but in the control group the correlation was nonsignificant, \( r = .04, p > .05 \). Hence, among CSR group veterans, the more a veteran endorses anxious attachment, the more concern he reports for his children during their service.

The Moderating Role of Attachment Dimensions

The third hypothesis dealt with the unique contribution of CSR, attachment avoidance and anxiety and posttraumatic symptoms to parenthood indices among the total sample.

### Table 1

Means and Standard Deviations on Parental Functioning, Parental Satisfaction, and Concern for the Child During Military Service According to CSR and PTSD Groups

<table>
<thead>
<tr>
<th></th>
<th>NCSR (N = 210)</th>
<th></th>
<th>CSR (N = 267)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>NPTSD (n = 181)</td>
<td>PTSD (n = 29)</td>
<td>NPTSD (n = 172)</td>
<td>PTSD (n = 95)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Parental functioning</td>
<td>3.50</td>
<td>0.38</td>
<td>3.09</td>
<td>0.80</td>
</tr>
<tr>
<td>Concern for the child during military service</td>
<td>1.76</td>
<td>0.68</td>
<td>1.67</td>
<td>0.75</td>
</tr>
</tbody>
</table>

*Note.* CSR = combat stress reaction; PTSD = posttraumatic stress disorder.

** \( p < .01 \).  *** \( p < .000 \).
Furthermore, we hypothesized that attachment dimensions would moderate the relations between posttraumatic symptoms and parenting measures, above and beyond other research variables. To test the hypothesis, we performed three hierarchical regression analyses in which the variables were introduced in five steps. The control variables of age and income level were entered in the first step. The CSR group variable was entered in second step. The two attachment dimensions—avoidance and anxiety—were entered in the third step. The total number of posttraumatic symptoms was entered in the fourth step. Interactions between the predicting variables were entered in the fifth step after their components have been centered.

The total set of variables explained 35% of the variance of the parental satisfaction, \( F(10, 453) = 23.50, p < .00; \) followed by parental functioning, 33%; \( F(10, 453) = 21.97, p < .00; \) and finally the father’s concern for his children in the military, 21%; \( F(10, 275) = 7.10, p < .00. \)

As can be seen in Table 2, beyond the contribution of the control variables, inclusion in the CSR group made a contribution ranging between 1% to 6%. The highest contribution was for the father’s concern for his children during military service followed by parental functioning and parental satisfaction. The findings suggest that veterans with antecedent CSR were more concerned for their children serving in the military, and reported lower parental functioning and satisfaction than non-CSR veterans.

In the third step, the contribution of attachment avoidance and anxiety ranged from 3% to 26%. Attachment dimensions contributed most of the parental satisfaction variance followed by parental functioning and parent’s concern for the child during military service. Of the two indices of attachment, avoidance contributes to both parental satisfaction and parental functioning, but not to the father’s concern for his children in the military. The attachment anxiety dimension contributed to the three measures of parenthood.

### Table 2

<table>
<thead>
<tr>
<th>Predicting variables</th>
<th>Parental functioning ((N = 477))</th>
<th>Parental satisfaction ((N = 477))</th>
<th>Concern for the child during military service ((N = 288))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>(-0.01)</td>
<td>0.01</td>
<td>(-0.04)</td>
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*p < 0.05. ** p < .01. *** p < .001.
However, for both parental functioning and satisfaction, the contribution of avoidance was higher than the anxiety dimension. Veterans with high levels of attachment-anxiety or attachment-avoidance also reported lower parental functioning and satisfaction.

In the fourth step, the contribution of posttraumatic symptoms ranged between 2% to 7%. Posttraumatic symptoms contributed most to the parent’s concern about children in the military followed by parental satisfaction and parental functioning. Hence, subjects with a high rate of posttraumatic symptoms also reported higher concern for children serving in the military and lower parental satisfaction and parental functioning.

In the fifth step, only the interaction between posttraumatic symptoms and attachment-avoidance made significant contributions to parental functioning. In order to examine the moderating role of attachment-avoidance on the relation between posttraumatic symptoms and parental functioning, we followed Aiken and West’s (1991) and Holmbeck (2002) recommendations and conducted post hoc probing for this possible moderator. We separated these variables into two by adding and subtracting one standard deviation from the value for each participant (high and low posttraumatic symptoms, high and low attachment-avoidance). Results of the post hoc probing supported the moderating effect of attachment-avoidance on the relation between posttraumatic symptoms and parental functioning. For those who reported high levels of attachment-avoidance, we found a stronger β coefficient between posttraumatic symptoms and parental functioning (β = −0.33, p < .00) than among those who reported low levels of attachment-avoidance (β = −0.07, p = N.S).

Discussion

The main findings of this study show that veterans who suffered from PTSD, with or without CSR, reported lower levels of both parental functioning and parental satisfaction, compared to veterans who did not suffer from PTSD. The findings also show that veterans who suffered from both CSR and PTSD reported higher levels of concern for their children during their offspring’s military service compared to veterans without antecedent CSR. Furthermore, the attachment dimensions contributed most to the explanation of parental satisfaction and parental functioning. In addition, we found attachment-avoidance to moderate the relationship between posttraumatic symptoms and parental functioning, but not the relationship with parental satisfaction and father’s concern for the child during military service.

Trauma-Induced Psychopathology and Parenting

Previous studies have shown that CSR may leave a harmful imprint on the veteran’s self-image (Solomon, 1993). It is possible that over the years, CSR veterans continue to have difficulties trusting their capabilities as husbands and fathers, in part due to the shattering of their masculine identity during combat. Also, in line with family stress theory, it may be assumed that when family members wit-ness the father’s difficulties in regaining his former family roles, they may react with resentment and destabilization of familial borders. This, in turn, may further undermine father’s perception of their parental functioning and the satisfaction from their role as a parent (Boss & Couden, 2002).

The findings concerning the relationship between PTSD and parenting dimensions are compatible with earlier studies documenting inadequate parenting skills (e.g., Berz et al., 2008) and low levels of satisfaction from the parental role in traumatized U.S. veterans (Jordan et al., 1992). Several PTSD symptom clusters may account for the inverse relationships between PTSD and parental functioning and satisfaction. Specifically, avoidance and emotional numbness symptoms on one hand, and hyperarousal symptoms on the other hand, were significantly implicated in father’s malfunctioning (Ruscio et al., 2002).

Avoidance entails reduced involvement of the traumatized veteran in his offspring’s life or even disengagement and disconnection (Marshall et al., 2006). Emotional numbness can be expressed in the limited ability to be emotionally available and involved. In this sense, these symptoms tend to severely undermine the father’s ability to create and maintain close meaningful and supportive interactions with his children, which in turn can lead to low parental satisfaction. Furthermore, studies have consistently documented high levels of anger and aggression among traumatized veterans (e.g., Taft, Street, Marshall, Dowdall, & Riggs, 2007), and a positive correlation between hyperarousal symptoms and aggression (Solomon, Dekel, & Zerach, 2008). Studies revealed that where traumatized fathers reported rejecting, controlling and aggressive behaviors toward their children they endorsed less satisfaction with their own parenting (Dekel et al., 2002).

It is interesting that our findings emphasize the role of antecedent CSR in the fathers’ concern for their offspring during the latter’s military service. It seems that these fathers who had succumbed to the stresses of war were also rather anxious in response to their offspring’s military service. It is possible that through their child’s military service, these traumatized veterans experience reactivation of their own traumatic memories. A number of studies point to the reactivation of symptoms when veterans were exposed to warlike stimulus such as memorial ceremonies in Israel (Solomon, 2001), or a fireworks disaster in the United States (Bramsen, Van-Der Ploeg, & Boers, 2006). This may be particularly problematic in Israel, where the majority of parents, including those who had themselves been traumatized in the military, will see their child go through mandatory military service. The children may bring home their army uniform and weapon, or discuss particular incidents, which can remind the veteran of their own military experiences.

Relationship Between Attachment Dimensions and Parenting

This study finding also shows that the both attachment dimensions were negatively associated with parenting. However, the attachment-avoidance dimension made more...
contribution to parental functioning, parental satisfaction, and father’s concern for the child during military service, compared to the contribution of the attachment-anxiety dimension. This finding is compatible with Ben-Shahar’s unpublished study (2006) that found that the attachment-avoidance dimension accounted for low levels of parental satisfaction in traumatized veterans. It is possible that attachment-avoidance inevitably produces low emotional involvement in the fathers’ interaction with their children. In contrast, fathers with an anxious-attachment tend to be highly involved with their children (Bar-Apter, 2004). It is possible that although anxious-attachment fathers are more involved, their feelings toward their parental role are still negative. However, their involvement might reduce the magnitude of their negative subjective parenting experience, as compared to the less-involved avoidant parents.

The Moderating Role of Attachment Dimensions

Our final hypothesis was that attachment-avoidance and attachment-anxiety will moderate the relationship between the posttraumatic symptoms and parenting measures. We found that attachment-avoidance moderated the relationship between posttraumatic symptoms and parental functioning, but not the relationship with parental satisfaction and father’s concern for the child during military service.

While it is known that insecure attachment can moderate the relations between a traumatic exposure and PTSD (e.g., Mikulincer & Shaver, 2007), to the best of our knowledge there is only one unpublished study that found attachment to moderate the relations between PTSD and parenting among a homogeneous chronic PTSD rehabilitation-challenged population (Ben-Shahar, 2006), and our results are only partially consistent with it. It is possible that attachment-avoidance might serve as a moderator of functional aspects of parenting. It is also possible that the avoidance characteristics (such as emotional distance) can radicalize posttraumatic symptoms that mainly affect parental behaviors like caring, supporting and encouraging, and affect less other dimensions of parenting.

Another possible explanation for the lack of consistency in the moderating analyses is rooted in the ongoing and dynamic processes of mutual effects between posttraumatic symptoms and attachment-based dimensions. A recent study reported that posttraumatic symptoms predicted changes in attachment orientation of former prisoners of war, many years after their release from captivity, more than attachment orientation predicted change in PTSD (Solomon, Dekel, & Mikulincer, 2008). It seems that the effects of attachment and PTSD are bilateral and change over time. It is therefore possible that at this point, 20 years after the war and in the face of other significant life events, the possible moderating role of attachment could not be manifested for more subjective parenting dimensions such as parental satisfaction.

With regard to the overall models explaining the parenting indices, our findings suggest that the most significant factors in parental function are attachment-avoidance and posttraumatic symptoms. The relatively small contribution of the attachment-anxiety dimension in the general model may be due to the close theoretical and empirical relationship between hyperarousal symptoms and anxiety (Solomon et al., 2008). Moreover, the decline in contribution of the CSR variable in the final model suggests the mediating role of posttraumatic symptoms and attachment dimensions to parenting, consistent with the findings of other studies (Galoiski & Lyons, 2004).

This study has several limitations. It has a cross-sectional design and cannot provide answers to the causal sequence between the studied variables. For example, it is conceptually impossible to infer that attachment style is predictive of parental satisfaction or functioning. Furthermore, pretrauma measures of attachment were not obtained in this study and it is unknown how veterans’ attachment orientations changed across the 20 years. Therefore, there is a need for longitudinal studies preferably with precombat measurement and with assessment of additional traumas that might have occurred over the years. The use of self-report measures, although very common in trauma studies, entails the risk of a reporting bias. Future studies should consider a longitudinal design, gathering data from multiple family members with a preference for objective measures, such as observation of fathers’ actual functioning. Using the same line of reasoning, examining physiological correlates (e.g., cortisol levels or Heart Rate) might be helpful in teasing out some of the issues regarding hyperarousal and attachment-anxiety. Another limitation is the lack of precombat assessment of family functioning, which strongly limits our ability to infer causality. Furthermore, regarding the index of fathers’ concern for children who served in the army, this outcome variable should be treated with some caution because some conflict eras may have presented more legitimate reasons for fear and concern than other eras.

The current study presents several unique contributions. This study addressed the issue of father’s concern for the child during military service among posttraumatic veterans, an issue which, to the best of our knowledge, has not yet been systematically investigated. This issue has relevance beyond the Israeli context, as the phenomenon of “military families” exists throughout the world, where there is a tradition of military service across multiple generations. Some questions remain unanswered with regard to the impact of the father’s worry on the offspring’s functioning in the army and the possible corrective experience of secure and positive military experience of the child on his father’s mental health.

The findings indicate that posttraumatic symptoms are implicated in the traumatized parenting. Various studies have suggested that such problems could be mitigated. Research points to the importance of posttraumatic fathers allowing their children to develop an independent path in their life, including in the military, without incorporating the “unresolved traumatic accounts” of their fathers (Barrett, 1996). Other studies suggested that the perception of the mother as caring moderated the negative impact on the mental distress and capacity for intimacy among adult children of posttraumatic survivors (Dinshtein, Dekel, & Polak, 2008). In addition, family therapy may help fathers and
children to alleviate the impact of trauma on parental function, and to develop constructive means of communication and coping. To be the parent of a young adult leads to new challenges such as the child’s independence and the choices he made regarding his military service. However, this stage also provides the opportunity for more equal dialogue that can bridge the difficulties this dyad struggling with.

Parenting is one of the central functions of adulthood. A sense of success or failure in this area is critical and meaningful to all parents, particularly for those who suffered a significant narcissistic wound and low self-esteem, as in the case of traumatized veterans. The current findings raise the possibility that traumatized veterans may have experienced a negative self-perception of their parental functioning and satisfaction. This may further contribute to a difficult family atmosphere, which in turn can negatively affect children’s emotional functioning.

References


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Received July 28, 2010
Revision received April 14, 2011
Accepted April 16, 2011