Impact of Posttraumatic Stress Disorder on the Relationship Quality and Psychological Distress of Intimate Partners: A Meta-Analytic Review

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The authors conducted a meta-analysis of the literature on associations between trauma survivors’ PTSD symptoms and the (a) relationship quality and (b) psychological distress of intimate partners. Results yielded a small combined effect size ($r = -.24$) for the association between PTSD and partners’ perceived relationship quality. Gender and military status moderated this association with a larger effect size for female partners of male trauma survivors than for male partners of female trauma survivors and a larger effect size for military samples than for civilians. The effect size of the association between PTSD and partners’ psychological distress was moderate in magnitude ($r = .30$). Analysis of hypothesized moderators indicated this association was stronger among military than civilian samples. The association was also stronger among samples of survivors who experienced traumatic events in the more distant past compared with those who experienced more recent events. Results support the systemic impact of one family member’s PTSD symptoms and highlight areas for future research.

Keywords: posttraumatic stress disorder, relationship quality, secondary traumatic stress, caregiver burden, meta-analysis

Symptoms of posttraumatic stress disorder (PTSD), such as arousal, avoidance, and emotional numbing, impair the psychosocial functioning of trauma survivors in a number of domains (Schnurr, Lunin, Bovin & Marx, 2009) including intimate relationships (Galovski & Lyons, 2004; Monson, Fredman & Dekel, 2009). A growing number of studies have shown that PTSD is associated with lower relationship satisfaction and higher levels of marital conflict and aggression in both military (e.g., Meis, Erbes, Polusny & Compton, 2010; Nelson Goff, Crow, Reisbig & Hamilton, 2007) and civilian (Monson, Gradus, La Bash, Griffin, & Resick, 2009; Taft, Monson, Shunn, Watkins, Panuzio & Resick, 2009) samples. A recent meta-analysis of this literature (Taft, Watkins, Stafford, & Watkins, 2011) yielded moderate effect sizes for the associations between PTSD and the survivor’s perceived relationship quality and the degree of psychological and physical aggression toward one’s intimate partner.

PTSD symptoms are also associated with the relationship satisfaction and psychological functioning of intimate partners. Research suggests that when one partner has elevated symptoms of PTSD, the other partner tends to report dissatisfaction with the relationship (Nelson Goff et al., 2007; Renshaw, Rodenaugh, & Rodrigues, 2010) and elevated psychological distress (Davidson, Berah & Moss, 2006; Dirkzwager, Bramsen, Ader, & van der Ploeg, 2005; Manguno-Mire et al., 2007). However, findings have been inconsistent. Some studies have yielded robust associations between one partner’s PTSD severity and the other partner’s outcome variables (e.g., Dekel & Solomon, 2006; Hamilton, Nelson Goff, Crow, & Reisbig, 2009), whereas others have shown small, nonsignificant correlations (e.g., Chartier-Otis, Guay & Marchand, 2009; Gold, Taft, Keehn, King, King, & Samper, 2007). This discrepancy could be a result of sampling and power issues. Alternatively, there may be moderators of the associations between PTSD symptom severity and partner outcomes. For example, the impact of one partner’s PTSD symptoms on the other partner’s psychological and relationship distress could depend on other variables such as the type of trauma experienced, the gender of the survivor, or the chronicity of the survivor’s symptoms.

The purpose of this study was to extend Taft et al.’s (2011) meta-analysis with an empirical review of the literature on the effects a trauma survivor’s PTSD symptoms has on his or her intimate partner. Our first objective was to obtain an overall effect-size for the associations between the trauma survivor’s PTSD symptoms and his or her partner’s (a) perceived relationship quality and (b) psychological distress. We use the term psychological distress to encompass the three outcomes that have been examined in the literature: (a) general distress (stress, anxiety and depression), (b) secondary traumatic stress, and (c) caregiver burden. Our second objective was to examine moderators of these associations based on the literature summarized below. Identification of moderators may shed light on the complexities of PTSD and partner well-being and hold important implications for research and clinical work with traumatized individuals and their partners.

Survivor PTSD Symptoms & Partner Relationship Quality

The symptoms and associated features of PTSD are said to impair a trauma survivor’s ability to effectively relate to close others which results in the partner feeling less satisfied and perceiving more problems in the relationship (Nelson Goff & Smith, 2007).
In particular, emotional numbing may interfere with intimacy whereas symptoms of anger and agitation likely reduce the partner’s sense of safety in the relationship (Dekel & Monson, 2010). Although research has generally supported these propositions (e.g., Allen, Rhoades, Stanley & Markman, 2010; Dekel & Solomon, 2006; Hamilton et al., 2009), there has been considerable variability in the magnitude and statistical significance of associations. Additionally, it is important to note that research on PTSD and partner relationship quality has most commonly involved a correlation design with self-report measures or diagnostic interviews administered to couples at one time point. As such, a causal relationship cannot be assumed.

The bulk of the existing literature involves samples of male combat veterans and their female spouses, with relatively fewer studies including female military or civilian trauma survivors. Among the studies we reviewed, PTSD of the trauma surviving partner was primarily assessed with self-report inventories including the civilian and military versions of the PTSD Checklist (Weathers, Litz, Herman, Huska & Keane, 1993) and the Mississippi Scale for Combat-Related PTSD (Keane, Caddell, & Taylor, 1988). These psychometrically sound measures are based on Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision (DSM–IV–TR; American Psychiatric Association, 2000) diagnostic criteria for PTSD and yield a symptom severity score. To a lesser extent, a clinical interview was used to determine the presence or absence of a categorical PTSD diagnosis.

Research comparing differences in the magnitude of effect sizes obtained in studies using symptom severity scores versus those using a categorical diagnosis has been inconsistent (Brewin, Andrews, & Valentine, 2000; Taft et al., 2011). In the present analysis there were too few studies using a categorical diagnosis to evaluate differences between the methods. However, it should be noted that the magnitude of the association may be influenced by the method used to assess PTSD.

Relationship quality of the spouse or partner was assessed in studies with commonly used, well validated, self-report measures of relationship adjustment (e.g., Dyadic Adjustment Scale; Spanier, 1976) and relationship satisfaction (e.g., Relationship Satisfaction Scale; Hendrick, Dicke, & Hendrick, 1988). To a lesser extent, an index of marital problems (e.g., Marital Problems Index; Jordan et al., 1992) was used to assess relational difficulties.

The use of self-report measures may result in reporter bias (i.e., under- or over-reporting of symptoms), and studies that use only self-report assessments are subject to mono-method bias.

We selected moderators based on varied characteristics of the studies we located as well as previous theory and research on couple relationships. Notable differences among studies included type of trauma that was experienced (military vs. nonmilitary), gender of the survivor, and the length of time since the traumatic event(s). Taft et al. (2011) found military status was a moderator of the association between PTSD symptoms and one’s own relationship satisfaction. These authors argued this discrepancy may be related to findings that combat-related PTSD is more likely to be associated with anger and hostility than noncombat related PTSD. Given that anger and hostility of one partner is predictive of the relationship satisfaction of the other partner (Markman, 1991; Roberts, 2000), we hypothesized that the magnitude of the association would be stronger among military samples.

Regarding gender, studies from the PTSD literature (Perrier, 2011; Spasожић, Heffer & Snyder, 2000) and research on other types of psychological distress (Dawson, Grant, Chou, & Stinson, 2007) suggest that in heterosexual relationships men’s symptoms are more strongly associated with women’s satisfaction than vice versa. This gender discrepancy could result from differences in expression of symptoms (e.g., externalizing vs. internalizing; Taft et al., 2011), differences in attunement to partner’s emotional experience (Thomas & Maio, 2008), or other gender role differences such as the tendency for women to assume a caregiver role. For these reasons, we hypothesized that the association between PTSD and partner relationship quality would be stronger for female partners of male trauma survivors than for male partners of female trauma survivors.

A third potential moderator is the amount of time that has passed since the traumatic event(s). Some studies assessed the survivor’s PTSD and their partner’s relationship quality two or more decades after the traumatic experience (e.g., Dekel & Solomon, 2006; Manguno-Mire et al., 2007), whereas other studies included participants who experienced traumatic events more recently (e.g., Allen et al., 2010; Renshaw, Rodrigues & Jones, 2008). We reasoned that over time one partner’s symptoms of chronic PTSD might erode the quality of the relationship. Thus, we hypothesized there would be a larger overall effect size for participants who experienced the traumatic event in the more distant past compared with those who experienced a more recent trauma (i.e., within the last five years).

PTSD & Partner Psychological Distress

One partner’s PTSD symptoms also appear to be associated with the other partner’s degree of psychological distress. It has been proposed that living with a partner who exhibits symptoms of PTSD will increase one’s likelihood of experiencing stress, anxiety, or depression (Nelson Goff & Smith, 2005). Distress could result from increased responsibilities if the trauma surviving partner is not able to function in former roles or from increased tensions in the household resulting from the trauma survivor’s irritability (Dekel & Monson, 2010; Fredman, Monson & Adair, 2011). If a spouse takes on a caregiver role to compensate for the impaired functioning of the survivor, the spouse may be at risk for developing caregiver burden (i.e., distress associated with caring for another person; Zarit, Todd & Zarit, 1986). Finally, learning about the traumatic experiences of one’s partner could result in the nontraumatized spouse developing symptoms and trauma responses similar to those exhibited by their partner, a process identified in the literature as secondary traumatic stress (Figley & Kleber, 1995).

Most studies showed significant associations between PTSD and partner psychological distress variables, with increased symptoms of one partner correlating with greater psychological difficulties of the other partner. Similar to the research on relationship quality, there was considerable variability among reported effect sizes. Additionally, with the exception of one prospective study (Beckham, Lytle & Feldman, 1996), all used a correlation design with data collected at one time point, thus precluding causal inferences. Regarding measurement, PTSD was primarily assessed with self-report inventories described in the previous section. General distress was measured with self-report instruments with...
sound psychometric properties including the Symptom Checklist-90R (Derogatis, 1983) and the Depression, Anxiety, and Stress Scale (Lovibond & Lovibond, 1995). Caregiver burden was primarily assessed with the Burden Interview (Zarit, Reever & Bach-Peterson, 1980), a self-report measure assessing feelings and concerns associated with caring for another person. Secondary traumatic stress was typically assessed with PTSD symptom inventories that were modified such that participants responded to items respective to their partner’s traumatic experience. Again, it should be noted that studies are subject to reporter and monotest bias given the reliance on self-report instruments.

As with research on relationship quality, the majority of studies we located used samples of male veterans and their female partners. Studies also varied in terms of length of time since the traumatic event (i.e., distant past vs. recent past). Given the variability in outcome and for reasons explained in the previous section, we tested military status and length of time since trauma as potential moderators. Additionally, we examined type of psychological distress (i.e., general distress, secondary trauma, caregiver burden) as a moderator to determine whether effect sizes differed for associations between PTSD and the three indicators of distress. Only one study (Gold et al., 2007) reported data on female trauma survivors and the psychological distress outcomes of male partners; therefore gender was not tested as a moderator of the association between PTSD and partner psychological distress.

Method

Selection of Articles

Potential studies for the meta-analyses of PTSD and (a) partner relationship quality and (b) partner psychological distress were located through an extensive literature search using three electronic databases: PsycINFO, PILOTS, and Medline. To locate studies on PTSD and partner relationship quality, we used combinations of the following search terms: PTSD, post-traumatic stress, trauma, marital, couple, dyadic adjustment, relationship quality, and relationship problems. To locate studies on PTSD and partner psychological distress, we used the same trauma focused terms along with the following: partner distress, partner psychological distress, secondary trauma, secondary stress, and caregiver burden. To supplement this search, we also reviewed the reference pages of relevant studies and review papers. Only peer-reviewed articles and dissertations that were available in English were included. There was no limit on publication date; included manuscripts had publication dates between 1992 and 2012.

We first reviewed the title and abstract of each manuscript to determine whether the study met the inclusion criteria outlined below. For articles that appeared to meet inclusion criteria a secondary examination of the methods section was conducted to determine whether the study was suitable for the analysis. Studies needed to contain an assessment of PTSD of the trauma surviving partner and an assessment of the partner’s outcome variable (i.e., relationship quality or indicator of psychological distress) to be included in the analyses. Studies that assessed PTSD as a categorical variable and studies assessing symptom severity on a dimensional scale were both included. To be included in the first analysis, studies needed to include a measure of partner relationship quality such as dyadic adjustment, marital satisfaction, or marital problems. For the second analysis studies were required to include data on partner psychological distress.

Our literature search on PTSD and partner relationship quality yielded 23 articles and five dissertations. After our review of the studies for inclusion criteria, nine studies were excluded leaving a total of 22 studies (18 peer-reviewed articles, four dissertations) for the analysis of partner relationship quality. Studies were excluded for the following reasons: (a) PTSD symptoms of the trauma surviving partner were not assessed (n = 2), (b) data were not collected from both partners, (c) overall family functioning, rather than relationship quality was assessed (n = 2), (d) the study was qualitative (n = 2), (e) the manuscript was a review paper (n = 2), and (f) the effect size could not be calculated from the information in the manuscript (n = 1). When the effect size could not be computed from the information provided in the manuscript, we attempted to contact the author via email; if the author did not respond, the study was not included in the analysis.

The literature search on PTSD and partner psychological distress yielded 30 peer-reviewed articles and four dissertations. After five were excluded, 25 studies (22 peer-reviewed articles; three dissertations) were left for the final analysis. Studies were excluded for the following reasons: (a) PTSD symptoms were not assessed (n = 1), (b) the study was qualitative (n = 1), (c) the manuscript was a review paper (n = 2), and (d) the effect size could not be calculated from the information in the manuscript (n = 1). Of these 25 studies, seven assessed general psychological distress, six assessed secondary traumatic stress, two assessed caregiver burden, and 10 assessed more than one of these constructs. The studies that were grouped in the psychological distress category primarily included measures like the SCL-90 (Derogatis, 1983) that assess a range of symptoms including anxiety, perceived stress, and depressed mood.

Coding of Articles

The coding of articles was conducted by the first two authors. We coded our final sample of articles for the following descriptive information: (a) author and year of publication, (b) number of participants, (c) data analytic method, (d) the measure used to assess the partner’s outcome variable (relationship quality or psychological distress), and (e) effect size. We also coded studies for our hypothesized moderators, including the following: (a) gender of the survivor, (b) military status of the survivor, and (c) when possible approximate time since the traumatic event(s). Regarding time since event, we grouped studies into two categories: participants who experienced the traumatic event within five years of participation (or publication) were coded as recent, whereas participants who experienced the traumatic event more than five years ago were coded as distant. When studies included participants who had experienced traumatic events at varied time points or when this information was not reported and could not be obtained through contacting the authors, the study was coded as not applicable for this category. There were only two discrepancies in the initial round of coding. These were clarified and resolved through closer examination of the manuscripts and discussion of categories.
Statistical Analysis

Effect size computation. The correlation coefficient $r$ was used as the effect size because this was the most commonly reported effect size among studies and it is consistent with our interest in evaluating strength of relationship between variables. When studies did not report a correlation coefficient, we used formulas outlined by Borenstein, Hedges, Higgins and Rothstein (2009) to convert the effect size into $r$. This primarily involved converting effect size $d$ into $r$ for studies that compared spouses of individuals with and without a PTSD diagnosis on outcome variables. When a study compared groups but did not report an effect size, we first calculated $d$ from the means and standard deviations reported in the article and then converted this value into $r$. When studies included more than one outcome variable, we used meta-analysis to combine the within-study effect sizes so that each study had only one effect size used in the main analyses.

Meta-analysis procedures. We used Comprehensive Meta-Analysis Version 2 to analyze the data. The analyses on relationship quality and partner psychological distress were conducted separately. For each analysis we first obtained an overall effect size using a random effects analysis. This type of analysis rests on the assumption that the true effect size varies among studies (Borenstein et al., 2009) and yields a summary or mean effect that represents the average of all true effects. To obtain the summary effect, the correlation coefficient for each study was first transformed into Fisher’s $Z$. These values were then weighted and combined to form a summary effect, which was then transformed back into $r$ for interpretation.

Only published studies and dissertations were included in the meta-analysis. This could result in a biased sample of studies given that manuscripts with significant findings are more likely to be published. To provide additional confidence in our results, we conducted two analyses for publication bias. The first, “classic fail-safe n” (Rosenthal, 1991) provides the number of nonsignificant findings that would be needed to make the obtained effect size nonsignificant ($p > .05$). We also computed Orwin’s (1963) fail-safe $n$. This analysis provides an estimate of the number of studies with an average correlation of zero that would be needed to bring the effect size down to a trivial value. Cohen’s (1969) guidelines were used to select a value that would be trivial in this context. According to this commonly used framework, a correlation with an absolute magnitude of .10 is considered small, .30 is medium, and .50 is large. We used the value .10 to represent a trivial value.

Results

Spouse Relationship Quality

Description of studies. Twenty-two studies on partner relationship quality ($n = 3,421$ couples) were included in the analysis. Four studies were dissertations, and 18 were published in peer-reviewed journals. Sixteen studies had samples of veterans or active duty soldiers; of these, six were with service personnel who served more recently and 10 included veterans from previous eras (e.g., Vietnam War, Yom Kippur War). Six studies included data on female trauma survivors and their spouse’s relationship satisfaction. Women in these studies reported a range of traumatic events including traffic accidents, childhood abuse, or trauma related to being a refugee. One study included female veterans who served in Vietnam. Twelve of the studies had participants who experienced a traumatic event in the more distant past, and seven included survivors of more recent events (two studies had survivors of both past and distant events).

All but one of the studies (i.e., Chartier-Otis et al., 2009) had correlations that were in the expected direction, indicating that increased symptoms of PTSD is associated with lower relationship quality. Some correlations were positive and others were negative depending on the outcome measure used to assess relationship quality (relationship problems vs. dyadic adjustment). For studies with a positive correlation in the expected direction, we entered the effect direction as negative to obtain an effect size reflecting the negative association of PTSD and relationship quality. The magnitude of the correlation coefficients in the 22 studies ranged from $-0.65$ to $0.07$.

Three of the studies included partners who had both experienced traumatic events and reported correlations between each spouse’s PTSD symptom severity and his or her partner’s relationship quality. Although not ideal for the treatment of dyadic data, to meet independence assumptions we combined the effect sizes for the women and men in the study to yield one effect size that was used to in the main analysis. However, in the moderator analysis, we examined results for male and female trauma survivors separately.

Results of analysis. Results of the random effects analysis for partner relationship quality are presented in Table 1. This analysis yielded a mean $r = -0.24$, $p < .001$, 95% CI $[-0.29, -0.19]$. Using Cohen’s (1969) guidelines for interpretation of the magnitude of effect sizes, this value falls in the small to moderate range. To account for the possibility of publication bias we obtained both the classic fail-safe $n$ (Rosenthal, 1979) and Orwin’s (1983) fail-safe $n$. The

<table>
<thead>
<tr>
<th>Table 1: PTSD &amp; Partner Relationship Quality</th>
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<tbody>
<tr>
<td>Dependent variable</td>
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<tr>
<td>Relationship quality</td>
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<tr>
<td>Military status</td>
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<tr>
<td></td>
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<tr>
<td>Gender of survivor</td>
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<tr>
<td></td>
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<tr>
<td>Time since event(s)</td>
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</tbody>
</table>

Note. Three studies reported outcomes for male and female survivors and one study reported outcomes for military and civilian samples; groups were examined separately in the moderator analysis for gender and military status. Two studies reported combined results for survivors of recent and distant events and were not included in the analysis for time since events.

*Variable is a significant moderator.
$p < .05$. ** $p < .01$. 

732 LAMBERT, ENGH, HASBUN, AND HOLZER
classic fail-safe $n$ indicated that 999 nonsignificant studies would be needed to bring the $p$ value above .05. Additionally, Orwin’s fail-safe $n$ indicated that 27 studies with an average correlation of zero would be needed to reduce the effect to a trivial size ($r = -.10$).

The test of heterogeneity indicated there was significant variability among the studies $Q (18) = 41.97$, $p = .004$. An estimated 49% of the variability among effect sizes was attributable to true differences, suggesting the presence of moderators. Military status and gender of the trauma survivor were significant moderators, $Q (1) = 5.98$, $p = .014$ and $Q (1) = 4.28$, $p = .045$, respectively. The combined effect size was larger for military samples than for civilians (see Table 1). Additionally, as shown in Table 1, the combined effect size for female partners of male trauma survivors was significantly larger than the effect size for male partners of female trauma survivors.

### Spouse Psychological Distress

**Description of studies.** A total of 25 studies ($n = 3,417$ couples) were included in the analysis on partner psychological distress. The majority (88%) were studies published in peer-reviewed journals. Five of the studies had nonmilitary trauma survivors including police officers, firefighters, Holocaust survivors, or samples composed of survivors of diverse events (car accidents, abuse, assault). Of the 20 studies with military samples four were with veterans or active duty personnel who served in Iraq or Afghanistan with the remainder composed of veterans who served in prior eras. Sixteen of the studies had participants who experienced a traumatic event in the more distant past, whereas six included survivors of more recent events (three studies had survivors of both past and distant events). Only one study reported data on female survivors and male partners. There were two studies that included male and female trauma survivors; however, correlations were not reported by gender.

Several of the studies included data on more than one of three outcome variables (i.e., general distress, secondary traumatic stress, or caregiver burden). These within-study effect sizes were first combined to yield one overall effect size for each study that was then used to calculate the overall effect size for partner psychological distress. All studies had effects in the anticipated direction, with more severe PTSD symptoms of one partner being associated with greater psychological distress of the other partner. The magnitude of the correlations reported in the studies ranged from .02 to .79.

**Results of analysis.** Results of the random effects analysis for partner psychological distress are presented in Table 2. The combined effect was $r = .30$, $p < .001$, 95% CI [.23, .36]. Using Cohen’s (1969) guidelines, this effect size is moderate in magnitude. The classic fail-safe $n$ calculated that 2,133 studies with nonsignificant correlations would be needed to bring alpha over .05. Orwin’s fail-safe $n$ indicated that 46 studies with an average correlation of zero would be needed to bring the combined effect to a trivial magnitude ($r = .10$).

The test of heterogeneity, $Q (24) = 121.11$, $p < .001$, indicated there was significant variability among effect sizes with 80% of the variability due to true differences. The effect sizes for caregiver burden, secondary traumatic stress, and general distress did not differ significantly $Q (2) = 4.55$, $p = .10$. Military status was a significant moderator; as shown in Table 2, the combined effect was stronger for the studies with military samples than for studies with civilian samples. Time since the traumatic event was also a moderator of the association between PTSD and partner psychological distress $Q (1) = 5.93$, $p = .02$. The combined effect for samples that had experienced a traumatic event in the more distant past (i.e., more than five years) was larger than the combined effect for samples that had experienced a traumatic event in the more recent past.

### Table 2

**PTSD & Partner Psychological Distress**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>$k$</th>
<th>$n$</th>
<th>Mean $r$</th>
<th>95% CI</th>
<th>$Q$</th>
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<tr>
<td>Outcome variable</td>
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<td></td>
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<tr>
<td>General distress</td>
<td>17</td>
<td>2,289</td>
<td>.23</td>
<td>[.29, .57]</td>
<td>39.20**</td>
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<tr>
<td>Secondary trauma</td>
<td>13</td>
<td>1,761</td>
<td>.28</td>
<td>[.17, .33]</td>
<td>62.18**</td>
</tr>
<tr>
<td>Caregiver burden</td>
<td>5</td>
<td>388</td>
<td>.43</td>
<td>[.19, .38]</td>
<td>20.18**</td>
</tr>
<tr>
<td>Military status*</td>
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<td></td>
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</tr>
<tr>
<td>Military</td>
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<td>3,067</td>
<td>.33**</td>
<td>[.26, .40]</td>
<td>103.08**</td>
</tr>
<tr>
<td>Civilian</td>
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<td>350</td>
<td>.14</td>
<td>[−.03, .30]</td>
<td>7.54</td>
</tr>
<tr>
<td>Time since event(s)*</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recent</td>
<td>6</td>
<td>942</td>
<td>.36**</td>
<td>[.30, .45]</td>
<td>23.15*</td>
</tr>
<tr>
<td>Past</td>
<td>15</td>
<td>818</td>
<td>.21**</td>
<td>[.09, .31]</td>
<td>39.16**</td>
</tr>
</tbody>
</table>

**Note.** Two studies reported results for survivors of recent and distant events and were not included in the moderator analysis for time since event. Ten studies reported data on more than one outcome measure and were examined separately in the moderator analysis for outcome variable.

*Variable is a significant moderator.

**Discussion**

The present study provided an empirical review of the literature on trauma survivors’ PTSD symptoms and the relationship quality and psychological distress of intimate partners. As a whole, results suggest that PTSD symptomology is associated with detrimental outcomes for one’s intimate partner. The combined effect of PTSD on partners’ perceptions of relationship quality was in the small to moderate range, with a stronger effect for female partners of male trauma survivors than for male partners of female trauma survivors. The association between PTSD and indicators of partners’ psychological distress (i.e., psychological distress, secondary trauma, caregiver burden) was in the moderate range. Notably, there was significant variability in effect sizes among studies, with some studies reporting small, nonsignificant associations between PTSD and partner outcomes and others reporting relatively large effect sizes.

Military status was a moderator of the association between PTSD and partners’ relationship quality as well as the association between PTSD and partners’ psychological distress. Taft et al. (2011) argued that military-related PTSD may be more impactful on one’s intimate relationship because it is more strongly associated with anger and hostility than PTSD among civilians. The same explanation could account for the relatively larger association between PTSD and psychological distress among military samples. For example, research suggests that anger and hostility of one spouse is associated with psychological distress (Brummett et al., 1999; Schwartz, Slater, Birchler, & Atkinson, 1991) of the other spouse. An additional explanation is that spouses of veterans
have had to cope with deployments and other stresses associated with military life which could be associated increased vulnerability to distress (Mansfield, Kaufman, Marshall, Gaynes, Morrissey, & Engel, 2010).

The finding that the association between PTSD and relationship quality was stronger when the partner with PTSD symptoms was male and the spouse was female could be a result of differences in emotional attunement to partners, differences in expression of symptoms, or other facets of gender roles. For example, experimental research with heterosexual couples (Klein & Hodges, 2001) suggests women are more accurate in their appraisals of emotions and thoughts of others, particularly when they identify more strongly with traditional female gender role traits (Laurent & Hodges, 2009). Female partners of male trauma survivors may be more keenly aware of their partner’s emotional suffering and changes in behavior (e.g., emotional numbing, withdraw), which in turn influences degree of satisfaction with the relationship. Additionally, gender differences in the expression of symptoms might play a role (Taft et al., 2011). Research on general psychopathology (Kramer, Krueger & Hicks, 2008) and PTSD (Miller, Grief & Smith, 2003; Miller & Resick, 2007) has demonstrated gender differences in internalizing versus externalizing syndromes, with women being more likely to manifest internalizing syndromes. It may be that certain externalizing behaviors are more impactful on the satisfaction of partners. Gender was not tested as a moderator of the association between PTSD and partner psychological distress because only one study reported results for male partners of female trauma survivors.

Our hypothesis regarding the relative amount of time since the traumatic event was partially supported. We found the association between PTSD and partner psychological distress, but not relationship quality, was stronger among samples where the traumatic event(s) were experienced in the more distant past (i.e., more than five years). One explanation for this discrepancy is that symptoms of PTSD first influence the other partner’s relationship quality and then over time begin to impact on the partner’s psychological distress. Alternatively, this discrepancy could be attributed to factors other than time, such as the age of participants, or for military samples, the nature of the conflict in which the veteran served.

Limitations

Results are limited by the relatively small number of studies on PTSD and partner outcomes. We were able to locate only 22 studies on partner relationship quality and 25 on partner psychological distress variables, the majority of which were published in peer-reviewed journals. It is possible that results of unpublished studies, if included in the analyses, would change the magnitude and statistical significance of the combined effects. However, results of the publication bias analyses provide confidence in our findings.

Results of the moderator analysis should be interpreted with caution given the small number of studies in each subcategory. In the analysis of psychological distress we combined general distress, caregiver burden, and secondary trauma, which may miss some of the nuances of the associations with PTSD. We did not find a significant difference among the effect sizes for these three variables; however, this finding could be attributable to the small number of studies on caregiver burden. Further, the grouping of articles by recent versus distant experience of a traumatic stressor may be imprecise given the variability in time since event among the articles included in the subgroups.

Other limitations mirror those in the original studies including research design, measurement of variables, and characteristics of the sample. Virtually all of the published studies we located were retrospective, thus causality and the direction of influence between variables cannot be assumed. Although the proposition that one partner’s PTSD influences the relationship quality and psychological distress of the spouse is compelling, the reverse may also be true. It is possible that the recovery process of individuals with PTSD is hindered by the poor quality of their intimate relationships or the psychological difficulties of their spouse. A few studies have examined longitudinal associations between PTSD and relationship quality. Erbes et al. (2012) found that veterans’ PTSD severity assessed at time one predicted spouses’ relationship quality assessed six to nine months later; however, relationship quality measured at time one did not significantly predict PTSD severity at time two. In contrast, research from the clinical literature (Tarrier, Sommerfield & Pilgram, 1999; Evans, Cowlishaw, Forbes, Parslow & Lewis, 2010) has shown that family functioning is associated with outcome of PTSD treatment. Specifically, veterans who have families with higher functioning (Evans et al., 2010) and lower expressed emotion (Tarrier et al., 1999) have demonstrated greater gains in psychotherapy than veterans with dysfunctional families. Additional longitudinal research is needed to clarify these associations.

It is also important to acknowledge that the association between partners’ degree of distress is likely complex and perhaps bidirectional. Although much of the literature emphasizes the impacts of one partner’s traumatic experiences and symptoms on his or her partner, in a study with spouses of veterans Renshaw et al. (2011) found that the majority of participants attributed their distress to factors other than their husband’s combat trauma. These authors argued that it is important to clarify the nature of partners’ psychological distress because there may be different treatment recommendations depending on whether the partner is experiencing secondary traumatic stress, PTSD from their own traumatic experience, or general psychological distress not associated with a traumatic event.

As previously noted, use of self-report measures may result in reporter or mono-method bias. It is possible that the use of self-report measures resulted in a larger or smaller effect size than would have been obtained with a categorical diagnosis. Only a few studies included in this review used clinician-administered diagnostic interviews to assess for PTSD. As such, we were not able to test method of assessment as a moderator of the associations between PTSD and partner outcome variables. Regarding the samples, all studies involved heterosexual couples, most with male trauma survivors and female spouses. Studies were primarily conducted in the United States and Israel, thus results may not generalize to other populations.

Future Research

Results of this empirical review highlight a number of areas for future research. First, we located more studies where the partner...
with PTSD was male and the spouse or partner was female. This imbalance in the literature is likely attributable to the utilization of samples of combat veterans who historically have mostly been male. However, given that women are more likely to experience certain types of potentially traumatic events (e.g., sexual assault) and more likely than men to develop symptoms of PTSD after such experiences (Tolin & Foa, 2006), further investigation of the impact of female PTSD on male partner well-being is clearly warranted. Additionally, given the number of women who have served in Iraq or Afghanistan (Street, Vogt & Dutra, 2009), research on PTSD and relationship functioning of female veterans and their spouses is needed. Research should also examine the impact of PTSD on partner outcomes among gay and lesbian couples, particularly in light the gender differences found in the present analysis.

Longitudinal research on couples would help clarify associations between PTSD symptoms and partner outcome variables and could shed light on other factors contributing to detrimental outcomes for partners. In particular, there may be additional moderators of the associations between PTSD and partner outcomes. For example, cross-sectional studies with male veterans and their spouses (e.g., Renshaw & Campbell, 2011; Renshaw et al., 2008) found that female spouses’ perceptions of husbands’ combat experience moderated the association between veteran PTSD and spouse outcome variables. Spouses who had husbands with more severe PTSD symptoms but believed their husbands had not experienced a great deal of combat tended to report relatively lower relationship quality and greater distress. Prospective studies that identify other variables that distinguish couples who are experiencing distress from those who are able to cope with one partner’s trauma-related symptoms would hold important implications for clinical work with this population.

Implications and Conclusion

Results of this study draw attention to the systemic nature of PTSD. Although the direction of the relationship has yet to be ascertained, our findings provide evidence for the association between PTSD symptoms of one partner and the relationship and psychological functioning of the other partner. Accordingly, consideration of partner psychological distress and relationship difficulties may be advantageous in the treatment of individuals with PTSD. Couple therapies that address traumatic stress such as cognitive–behavioral conjoint (Monson, Fredman & Adair, 2008) and emotionally focused therapy for couples (Johnson, 2002) could be a beneficial adjunct to treatment. Both models have shown promising initial results with samples of veteran (Monson et al., 2008) and civilian (MacIntosh & Johnson, 2008) couples.

In conclusion, to our knowledge, this is the first meta-analysis of the literature on PTSD and intimate partner outcomes. Despite limitations, results support the importance of considering partner well-being in research and clinical work with traumatized individuals. Future research with more diverse samples and different methodologies will help to clarify associations between one partner’s trauma-related symptoms the other partner’s perceived relationship quality and psychological distress.

References

References marked with an asterisk indicate studies included in the meta-analysis.


Received March 22, 2012
Revision received June 5, 2012
Accepted June 7, 2012