RELATIONAL IMPACT OF FEMALE PRIMARY TRAUMA IN A MILITARY SAMPLE

by

STACY L. HAMILTON

B.A., Utah Valley State College, 2003
B.A., Brigham Young University, 2003

A THESIS

submitted in partial fulfillment of the requirements for the degree

MASTER OF SCIENCE

Department of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2007

Approved by:

Major Professor
Dr. Briana Nelson Goff

ABSTRACT

Events of war have long been considered traumatic and research has found that those exposed to war may develop posttraumatic stress disorder (PTSD) or psychological difficulties. Although research has indicated the instance of increased PTSD and other symptoms in returning *Operation Iraqi Freedom*/ *Operation Enduring Freedom* (OIF/OEF) soldiers, it has yet to explore the trauma experiences of their female partners. The current study sought to address this limitation by exploring the ways in which partners'/wives' primary trauma influenced the marriage relationship. Given the tendency for trauma to negatively influence relationship satisfaction, it was expected that the primary trauma experiences of the female partners of OIF/OEF soldiers would likewise negatively impact relationship satisfaction for both themselves and the soldiers.

Results from this study indicated that female primary trauma, particularly trauma related to PTSD symptoms, has an influence on levels of relationship satisfaction, both for female partners and soldiers. Specifically, female partner re-experiencing symptoms were found to most significantly predict their own relationship satisfaction, while female partner arousal symptoms most significantly predicted soldier relationship satisfaction.

Understanding female primary trauma may be important given the seeming sensitivity females have for developing PTSD and for experiencing symptoms that are chronic in nature. In addition, female civilian partners may play a key role in helping military families to function well throughout the deployment process given their assumption of major family responsibilities. Further, their emotional wellbeing may be considered a "family affair" due to the role that family relationships may serve in helping

individuals cope with trauma, including returning soldiers. Indeed, civilian female partners appear to play a major role in helping military families cope with stresses associated with war and the deployment process. As such, the emotional condition of military families can no longer be considered solely within the realm of soldier trauma or secondary traumatization, but instead include consideration of the influence of female primary traumatic experiences.

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Acknowledgements

I would like to thank Dr. Briana Nelson Goff for her support, mentorship, and guidance throughout this project. I would also like to thank Dr. Tony Jurich, for his encouragement, humor, and support throughout this learning process we call “research.” Likewise, I would like to thank Dr. Gayle Doll for her confidence in my abilities and her patience as I learned to acknowledge my own growth.

CHAPTER 1 - Review of Literature

As defined by Carlson and Dalenberg (2000), a traumatic event may be any event that is unpredictable, uncontrollable, and intensely negative. As such, an extensive variety of events may be considered "traumatic," including childhood sexual or physical abuse, natural disasters, illness, traumatic accidents, and war (American Psychological Association [APA], 2000). Traumatic events have been found to have a negative impact in both individual and systemic realms.

Individual Impact of Trauma

Individually, traumatic events may result in experienced flashbacks, intrusive thoughts related to the trauma, psychic numbing, sleep disturbances, exaggerated startle responses, increased anger, and isolation (APA, 2000), which, when experienced in combination may result in a cluster of symptoms termed posttraumatic stress disorder (PTSD; APA, 2000). Prevalence rates of experienced traumatic events has been found to be moderately high in non-clinical populations (Breslau, Kessler, Chilcoat, Schulz, Davis, & Andreskei, 1998; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993**)**, with gender differences manifested both in types of trauma reported and prevalence rates of PTSD. Although men appear to experience a greater number of traumatic events (Breslau et al., 1998; Stein, Walker, Hazen, & Forde, 1997), women appear to more frequently report symptoms consistent with PTSD (Breslau, Davis, Andreski, & Peterson, 1991; Breslau et al., 1998; Kessler et al., 1995). Studies show a trend for women to not only have a higher "conditional

probability of PTSD" (Breslau et al., 1998), but for their symptoms to be more chronic in nature (Breslau et al., 1998; Breslau & Davis, 1992).

Systemic Impact of Trauma

Although much of the current literature focuses on the individual trauma survivor, trauma not only results in individual symptomology. Research has illustrated the systemic impact of trauma within the couple relationship. Specifically, those who have experienced an event considered traumatic may exhibit avoidance (Whiffen & Oliver, 2004) or have difficulties with intimacy (Riggs, Byrne, Weathers & Litz, 1998) and cohesion/connection (Nelson & Wampler, 2000). Trauma often has a negative impact on relationship quality, both for the trauma survivor (Broman, Riba, & Trahan, 1996; Whiffen & Oliver, 2004) and their partner (Dirkzwager, Bramsen, Adèr, & van der Ploeg, 2005; Nelson & Wampler, 2000). Although the mechanisms for these effects may be unique to each couple, relational "quality" may be related to emotional numbing (Galovski & Lyons, 2004; Riggs et al., 1998), resultant communication difficulties (Broman et al., 1996), and disrupted intimacy (Broman et al., 1996; Solomon et al., 1992).

Extending beyond the couple relationship, the effects of trauma can also systemically result in individual symptoms for the partners of victims. This concept of secondary traumatization has received increased research focus, as partners of victims may exhibit PTSD symptoms (Dirkzwager et al., 2005; Maloney, 1988), psychological distress (Arzi, Solomon, & Dekel, 2000; Lev-Wiesel & Amir, 2001; Mikulincer, Florian, & Solomon, 1995; Solomon et al., 1992), somatization (Dirkzwager et al., 2005; Mikulincer et al., 1995; Solomon et al., 1992), negative perceived social support

(Dirkzwager et al., 2005), depression, and obsessive compulsivity (Solomon et al., 1992). Research postulates that this secondary traumatization may occur for a number of reasons, including the extent of caregiver burden (Arzi et al., 2000; Nelson & Wright, 1996), and identification with the spouse as victim (Maloney, 1988). The Couple Adaptation to Traumatic Stress (CATS) model (Nelson Goff & Smith, 2005) further postulates that secondary trauma experienced by one partner can influence that primary partner's trauma symptoms. As such, a recurring feedback loop can be created as primary symptoms influence secondary symptoms that can then influence primary symptoms. Within such a cyclical system, both the needs of the individual and the couple can become paramount and the couple relationship may be "at greater risk of disruption" (Nelson Goff & Smith, 2005, p.151). Adaptation to traumatic stress is therefore important and dependent in the couple dyad upon three interacting factors: "individual level of functioning, predisposing factors and resources, and couple functioning" (Nelson Goff & Smith, 2005, p.151).

Impact of Trauma on Military Samples

Events of war have long been considered traumatic and research has found that those exposed to war may develop PTSD or psychological difficulties (Barrett & Mizes, 1988; Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004). Further, this trauma has extended beyond the experience of the soldiers themselves, individually influencing their partners through secondary traumatization (Maloney, 1988; Solomon et al., 1992) and their couple relationship (Carroll, Rueger, Foy, & Donahoe, 1985; Jordan et al., 1992; Riggs et al., 1998). Research indicates that components of emotional numbing or avoidance appear to have a negative impact on relationship satisfaction (Cook, Riggs,

Thompson, Coyne, & Sheikh, 2004; Galovski & Lyons, 2004; Riggs, et al. 1998). Sherman, Zanotti, and Jones (2005) hypothesize that avoidance symptoms may cause veterans to become socially isolative which can likewise influence their partners to withdraw from various social activities. Further, the level of connectedness may dim within the couple as partners emotionally withdraw, leaving them to feel that they simply cohabitate rather than share an intimate relationship.

Although much research has been conducted on the influence of primary trauma on soldiers, little research has addressed the influence of primary trauma in the spouse/partners of soldiers. Though some research (Maloney, 1988) appears to recognize the stress that results in partners of soldiers dealing with primary and secondary trauma experiences, the implications of these primary experiences have yet to be explored. More specifically, the current literature has failed to address the effect of female partners' primary trauma on their intimate relationships in recent military couples. This influence is important because perceived social support (Solomon, Mikulincer, & Habershaim, 1990) and significant relationships (Barrett & Mizes, 1988) are considered to be strong mediating forces in dealing with trauma and its possible effects. Further, in order to understand the needs of current military families who may be constantly exposed to war trauma, it is important to understand the totality of the trauma factors they face.

Recent U.S. military engagements, including *Operation Iraqi Freedom* (OIF) and *Operation Enduring Freedom* (OEF) have resulted in the deployment of more than 180,000 soldiers combined since 2001 (Globalsecurity.org, 2005), and deployments as a whole within the U.S. Army have increased over time (Castro & Adler, 1999). Given the tendency of deployments to be stress-related, it can be assumed that their increase would

only exacerbate this effect. Family members may be left to assume responsibilities employed by the soldier prior to his/her deployment (Armstrong, Best, & Domenici, 2006) and spouses may be charged with responsibility to ensure that all remains well at home, both during the deployment and re-integration periods. Consequently, the wellbeing of the spouse may become paramount, both individually and relationally.

Although research has indicated the instance of increased PTSD and other symptoms in returning OIF/OEF soldiers (Hoge et al., 2004), research has failed to explore the trauma experiences of their wives. The current study sought to address this limitation by exploring the ways in which partners'/wives' primary trauma influenced their marriage relationship. Given the tendency for trauma to negatively influence relationship satisfaction (Riggs et al., 1998), it was expected that the primary trauma experiences of the female partners of OIF/OEF soldiers would likewise negatively impact relationship satisfaction for both themselves and the soldiers.

Previous research conducted by Nelson Goff, Crow, Reisbig, and Hamilton (in press) focused on the results of individual trauma and relationship satisfaction in OIF/OEF couples. In the previous study, the soldiers' Trauma Symptom Checklist-40 (TSC-40; Briere, 1996) scores significantly predicted reduced dyadic satisfaction (DAS scores) for both the soldiers and female partners. The current study expands the previous research by analyzing the effects of the female partner's primary trauma on relationship satisfaction for both themselves and the soldiers. The hypotheses for the current study were:

(1) Individual trauma symptoms of female partners will predict lower relationship satisfaction for themselves and male partners.

(2) Greater individual trauma symptoms of female partners, specifically avoidance symptoms will predict their lower relationship satisfaction.

(3) Greater individual trauma symptoms of female partners, specifically avoidance symptoms will predict lower relationship satisfaction in the soldiers.

CHAPTER 2 - Methods

Procedure

The research described here is part of a larger study of military couples extending beyond their OIF/OEF deployment experiences, including data from quantitative surveys and individual qualitative interviews with each partner. This study included results from 45 couples in two small cities in the Midwest that neighbor Army posts in close proximity to the university where the research was conducted. Ft. Riley is a fairly large post with approximately 10,000 active duty military personnel and 12,020 family members, housing several combat units (Globalsecurity.org, 2005). Ft. Leavenworth is primarily a training facility for majors and lieutenant colonels representing all branches of the Army, with a population of approximately 5,253 military personnel and 4,613 family members (Globalsecurity.org, 2005). A “class” of approximately 1,000 officers attends this training college annually.

Participants were recruited from within the local communities through a variety of methods, including publicly posted flyers and newspaper announcements; referral from Army Family Readiness Groups, chaplains, and other local military sources; and referral by other research participants. Participants were not recruited by contacting staff or

soldiers directly through the military bases. All recruitment occurred through contacts in the surrounding communities or through contacts *to* the researchers.

The sampling method was both purposive and convenience, in that recent deployment to OIF or OEF was a criterion for participation and couples volunteered to participate. Inclusion criteria also included the following: all study participants were 18 years of age or older, had been in their current relationship for at least one year, and denied current substance abuse or domestic violence during an initial telephone screening. Each couple that completed questionnaires and the interview process received $50 for their participation.

The research procedure was approved by the University Institutional Review Board (IRB), with assurances made to follow informed consent procedures and to protect participant privacy and confidentiality. Because the research project was not completed within the military system, nor was data collected on the military posts, military IRB approval was not included in the research procedure process.

Data collection began 8/25/04 and concluded 6/20/05. Out of 56 total couples who initially agreed to complete the study protocol, 11 cancelled or did not show for their scheduled appointment, resulting in a final sample size of 45 couples with complete data (response rate = 80.36%).

Research Participants

The total sample included 45 male soldiers and 45 female partners. Although female soldiers were not excluded from the sample, no female soldiers elected to participate. Of the soldiers, 95.6% (n = 43) served in OIF, while 4.4% (n = 2) served in OEF. In addition, 91.1% (n = 41) were recruited from the Ft. Riley area and 9.9% (n = 4)

were recruited from the Ft. Leavenworth area. The average length of deployment was 10.03 months (*SD* = 3.98), with an average of 5.10 months (*SD* = 3.39) since the time the soldiers redeployed home and when they completed the research study.

Employment status indicated that 95.6% (*n* = 43) of soldiers worked full-time in the military, with 4.4% (*n* = 2) reporting that they were unemployed. For the female partners, 51.1% (*n* = 23) worked full- or part-time. The median annual income range for participants was $30,000-39,999. The participants indicated that 95.6% (*n* = 43) were currently married and the average relationship length was 5.31 years (*SD* = 5.47; range = 5 months to 21 years; 5 months was the length of marriage for couples who had been together as a couple longer but recently had been married). A summary of participant demographics is presented in Table 2.1.

Table 2.1 Demographic Statistics

	Total Army		Current Sample (*n* = 45)	
	Soldiers[a]	Spouses[b]	Male Soldiers	Female Partners
Mean Age	28.2	31.0	31.18 (*SD* = 6.90)	29.36 (*SD* = 6.27)
Ethnicity				
E.A. [c]	60.1%	68.1%	82.2% (*n* = 37)	77.8% (*n* = 35)
A. A. [d]	22.7%	15.5%	11.1% (*n* = 5)	4.4% (*n* = 2)
N. A. [e]	n.a.	4.9%	2.2% (*n* = 1)	8.9% (*n* = 4)
Mexican	10.3%	12.7%	2.2% (*n* = 1)	2.2% (*n* = 1)

Amer./Latino	3.8%	7.0%	0	4.4% (*n* = 2)
Asian/Pacific Islander	3.1%	n. a.	2.2% (*n* = 1)	2.2% (*n* = 1)
Other				
Rank				
Enlisted	83.7%		69% (*n* = 31)	
Commissioned Officers	13.9%		27% (*n* = 12)	
Warrant	2.4%		4% (*n* = 2)	

[a] Office of Army Demographics FY 2004 (2004)
[b] Peterson (2002)
[c] E. A. = European American
[d] A. A. = African American
[e] N.A. = Native American

Measurement Instruments

Assessment of Individual Symptoms

Traumatic Events Questionnaire (TEQ). The TEQ (Vrana & Lauterbach, 1994) was used to confirm the history of trauma and types of trauma exposure reported by the participants. The purpose of the scale is to determine the experience of each participant with various types of trauma that have the potential to produce symptoms of post-traumatic stress (Lauterbach & Vrana, 1996). The scale used in the current study included six items addressing war events (*Did you ever serve in a war zone where you received hostile incoming fire from small arms, artillery, rockets, mortars, or bombs*?), two traumatic events in childhood (*As a child, were you the victim of physical abuse*?), and nine other traumatic events (*Have you been a victim of a violent crime such as rape,*

robbery, or assault?). In the current study, affirmative answers on the 17 TEQ items were tallied to provide a "TEQ total" score, ranging from 0 to 17, with higher scores indicating more types of traumatic events experienced. The TEQ has shown appropriate reliability, with test-retest reliability coefficients ranging from .72 to 1.00 (Vrana & Lauterbach, 1994).

Purdue Post-Traumatic Stress Disorder Scale-Revised (PPTSD-R). The PPTSD-R (Lauterbach & Vrana, 1996) consists of 17 items that correspond to each *Diagnostic and Statistical Manual for Mental Disorders, 4th Edition*, diagnostic criteria for PTSD (APA, 1994), with three subscales that reflect the three general symptom categories of Re-experiencing (4 items), Avoidance (7 items), and Arousal (6 items). The PPTSD-R items are scored from 1 ("Not at all") to 5 ("Often"), with continuous total scores ranging from 17-85, with higher scores indicating greater PTSD symptoms. The measure, which does not provide a diagnosis or cut-off score, asks participants to indicate how often each reaction occurred during the previous month. Examples of items from the PPTSD-R include the following: *Have you had upsetting dreams about the event; Did you avoid activities or situations that might remind you of the event;* and *Have you felt unusually distant or cut off from people?* Specific avoidance items include the following: *Have you felt emotionally "numb" or unable to respond to things emotionally the way you used to; Have you been less optimistic about your future; Did you avoid thoughts or feelings about the event; Did you have difficulty remembering important aspects of the event?*

The PPTSD-R has been shown to have adequate internal consistency, with coefficient alpha for the total score at .91 (Lauterbach & Vrana, 1996) and good test-retest reliability for the total score (.72). Convergent validity has been shown by

moderate correlations with the Mississippi Scale for PTSD (C-Mississippi; Keane, Caddell & Taylor, 1988) (r = .50) and the Impact of Events Scale (IES; Horowitz, Wilner, & Alvarez, 1979) (r = .66) (Lauterbach & Vrana, 1996). For the current study, Cronbach alpha estimates for the subscales ranged from .73 (soldiers' avoidance subscale) to .93 (partners' arousal subscale), with total estimates at .92 for soldiers and .95 for female partners.

Trauma Symptom Checklist-40 (TSC-40). The TSC-40 (Briere, 1996; Briere & Runtz, n.d.) is a research measure that evaluates symptomatology in adults who have experienced previous traumatic experiences. The TSC-40 is a 40-item self-report instrument that ranges from 0 ("Never") to 3 ("Often") and includes six subscales: Anxiety (9 items), Depression (9 items), Dissociation (6 items), Sexual Abuse Trauma Index (7 items), Sexual Problems (8 items), and Sleep Disturbance (6 items). Total continuous scores range from 0-120. As with the PPTSD-R, higher scores indicate greater trauma symptoms. The measure, which does not provide a diagnosis or cut-off score, asks participants to indicate how often they have experienced symptoms in the last two months and includes such symptoms as headaches, insomnia, flashbacks, sexual problems and other individual symptoms that may result from previous childhood or adult traumatic experiences.

The TSC-40 was included in the current study because of the additional symptom subscales it provides and because it provides a measure of general trauma symptoms beyond PTSD. The TSC-40, which has been used with a variety of trauma survivors (c.f., Briere & Runtz, n.d., for a list of references using the TSC-40), has demonstrated adequate reliability, with subscale alphas ranging from .66 to .77 and total score alphas

averaging between .89 and .91. The TSC-40, particularly the PSAT subscale which evaluates symptoms specific to experiences of sexual victimization, also appears to have adequate discriminate validity both in non-clinical (Elliot & Briere, 1992) and clinical settings (Whiffen, Benazon, & Bradshaw, 1997). In the current study, Cronbach alpha estimates for the total scale were.92 for soldiers and .94 for female partners. The correlation between the PPTSD-R and the TSC-40 in the current study was .82.

Assessment of Relationship Functioning

Dyadic Adjustment Scale (DAS). Relationship satisfaction/quality was assessed with the DAS (Spanier, 1976), which is a 32-item, variable-Likert measure assessing the quality of the relationship as perceived by both partners. Total scores range from 0-151, with higher scores indicating greater relationship satisfaction. Examples of items include the following: *How often have you discussed or considered divorce, separation, or terminating your relationship; How often do you and your partner "get on each other's nerves";* and *Do you and your partner engage in outside interests together?*

The DAS has demonstrated good internal consistency on the total score (alpha = .96; Fischer & Corcoran, 2000). The DAS has adequate convergent validity correlations (.86 - .88) with the Locke-Wallace Marital Adjustment Test (LWMAT, Locke & Wallace, 1959, as cited in L'Abate & Bagarozzi, 1993), from which it was derived. Cronbach alpha estimates for the DAS were .93 for both soldiers and female partners.

CHAPTER 3 - Results

Statistical Procedures

A series of linear multiple regression models, using the Statistical Package for the Social Sciences (SPSS, 2004) were completed to determine the independent variable(s) (trauma history and trauma symptom scores, as measured by the TSC-40, PPTSD-R, and TEQ scores for the female partners of soldiers) that best predicted the dependent variable (relationship satisfaction, as measured by the DAS scores for soldiers and their female partners). Based on this multiple regression analysis, additional multiple regression analyses were conducted with the PPTSD-R subscale results. Stepwise (statistical), multiple regression using backward deletion was used in the analyses resulting in the elimination of the least predictive variables from each model. Pre-analysis screening for multivariate outliers using Mahalanobis distance (Mertler & Vannatta, 2002) led to the deletion of one couple's data, leaving 44 couples' data available for the first two analyses, and 43 couples' data for the subscale analysis.

Correlations

Results indicated that significant negative correlations were found most strongly between female partners' PPTSD-R and DAS scores (r = -.48, p < .001) and between the female partners' PPTSD-R and soldiers' DAS scores (r = -.43, p < .01). Though significant, weaker negative correlations were also found between female partners' TSC-40 scores and their own DAS scores (r = -.44, p < .01), as well as soldiers' DAS scores (r = -.35, p < .05). No significant negative correlations were found between female partners' TEQ scores and their own DAS scores (r = -.28) and soldiers' DAS scores (r = -.26). Results regarding subscale data indicate significant negative correlations between the wives' Re-experiencing subscale and DAS score (r = -.45, p<. 01) and between wives'

Arousal subscale score and soldiers DAS score (r = .-44, p < .01). A summary of the correlation results is presented in Table 3.1.

Table 3.1 Descriptive Statistics and Correlations Between Key Study Variables

	M	SD	Correlation with Soldier DAS	Correlation with Partner DAS
Female Partner TEQ	13.00	3.12	-.26	-.28
Female Partner TSC-40	79.00	27.85	-.35*	-.44**
Female Partner PPTSD-R	34.77	16.98	-.43**	-.48***
Female Partner Reexperiencing	9.06	4.71	-.36*	-.45**
Female Partner Avoidance	13.39	6.40	-.37*	-.43**
Female Partner Arousal	12.32	7.30	-.44**	-.44**
Soldier DAS	116.42	17.20	—	0.66***
Female Partner DAS	113.56	18.74	0.66***	—

Note: n = 45
* p < .05. ** p < .01. *** p < .001, two-tailed.

Predicting Current Relationship Satisfaction Based on Trauma History and Trauma Symptoms

To test Hypothesis 1, two regression analyses were conducted to examine the predictive contributions of the female partners' trauma history and trauma symptoms, as measured by the TEQ, TSC-40, and PPTSD-R, on current relationship satisfaction (DAS scores) for both the female partners (first regression analysis) and the soldiers (second regression analysis). The most significant predictor of relationship satisfaction was the PPTSD-R scale, both for the female partners, R^2 = 0.21, $Adj\ R^2$ = 0.19; F (1,42) = 11.06, p < .01 and for the soldiers, R^2 = 0.33, $Adj\ R^2$ = 0.09; F (1,42) = 5.20, p < .05. Thus, Hypothesis 1 was partially supported, as the trauma symptoms (PPTSD-R) of female

partners significantly predicted relationship satisfaction scores for both themselves and the soldiers. Results of these analyses are presented in Table 3.2.

Table 3.2 Backward Multiple Regression Analyses Testing Hypothesis 1

	Female Partners' Trauma → Female Partners' DAS			*Female Partners' Trauma → Soldiers' DAS*		
Measures	B	*SE B*	β	B	*SE B*	β
Step 1	R = 0.48, *Adj* R^2 = 0.17, ΔR^2 = 0.23, F (3, 40) = 4.01*****			R = 0.34, *Adj* R^2 = 0.05, ΔR^2 = 0.12, F (3, 40) = 1.76		
TEQ	0.90	1.21	0.15	-0.06	1.12	-0.01
PPTSD-R	-0.45	0.26	-0.38	-0.24	0.24	-0.24
TSC-40	-0.23	0.23	-0.24	-0.10	0.21	-0.12
Step 2	R = 0.47, *Adj* R^2 = 0.18, ΔR^2 = -0.01, F (2, 41) = 5.80******			R = 0.34, *Adj* R^2 = 0.07, ΔR^2 = 0.00, F (2, 41) = 2.71		
PPTSD-R	0.39	0.25	-0.33	-0.24	0.23	-0.24
TSC-40	-0.16	0.21	-0.17	-0.10	0.19	-0.12
Step 3	R = 0.46, *Adj* R^2 = 0.19, ΔR^2 = -0.01, F (1, 42) = 11.06******			R = 0.33, *Adj* R^2 = 0.09, ΔR^2 = -0.01, F (1, 42) = 5.20*		
PPTSD-R	-0.54	0.16	-0.46**	-0.34	0.15	-0.33*

Note: n = 44

* p < .05. ** p < .01. *** p < .001.

Current Relationship Satisfaction Based on PPTSD-R Subscales

Because the PPTSD-R most significantly predicted relationship satisfaction in the overall regression analysis, only the PPTSD-R subscales were included in the analyses for Hypotheses 2 and 3. To test Hypotheses 2 and 3, the predictive value of the PPTSD-

R subscale scores (Arousal, Avoidance, and Re-experiencing) on the soldiers' and the partners' current relationship satisfaction was examined through multiple regression analyses. A separate regression analysis was conducted for each hypothesis, which are presented in Tables 3.3 and 3.4, respectively.

Table 3.3 Backward Multiple Regression Analyses Testing Hypothesis 2

PPTSD-R Subscales	B	*SE B*	β
Step 1	$R = 0.43$, $Adj\ R^2 = 0.12$, $\Delta R^2 = 0.18$, $F\ (3, 39) = 2.87$*		
Reexperiencing	-1.01	0.82	-0.26
Avoidance	-0.06	0.94	-0.02
Arousal	-0.48	0.72	-0.20
Step 2	$R = 0.43$, $Adj\ R^2 = 0.14$, $\Delta R^2 = 0.00$, $F\ (2, 40) = 4.42$*		
Reexperiencing	-1.08	0.74	-0.26
Arousal	-0.52	0.45	-0.21
Step 3	$R = 0.39$, $Adj\ R^2 = 0.13$, $\Delta R^2 = -0.03$, $F\ (1, 41) = 7.43$**		
Reexperiencing	-1.60	0.59	-0.39**

Note: $n = 43$

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3.4 Backward Multiple Regression Analyses Testing Hypothesis 3

PPTSD-R Subscales	B	*SE B*	β
Step 1	$R = 0.40$, $Adj\ R^2 = 0.10$, $\Delta R^2 = 0.16$, $F\ (3, 39) = 2.48$		
Reexperiencing	-0.52	0.79	-0.14
Avoidance	0.60	0.90	0.22
Arousal	-1.14	0.68	-0.49
Step 2	$R = 0.39$, $Adj\ R^2 = 0.11$, $\Delta R^2 = -0.01$, $F\ (2, 40) = 3.55$*		
Avoidance	0.36	0.81	0.13
Arousal	-1.15	0.68	-0.49
Step 3	$R = 0.38$, $Adj\ R^2 = 0.13$, $\Delta R^2 = -0.00$, $F\ (1, 41) = 7.04$*		
Arousal	-0.89	0.34	-0.38*

Note: $n = 43$
* $p < .05$. ** $p < .01$. *** $p < .001$.

Female partners' individual symptoms predicting their own relationship satisfaction

In testing Hypothesis 2, when female partners' PPTSD-R subscales (Arousal, Avoidance, and Re-experiencing) were entered as independent variables, female partners' Re-experiencing scores significantly predicted their relationship satisfaction (DAS) scores, $R^2 = 0.15$, $Adj\ R^2 = 0.13$; $F\ (1,41) = 7.43$, $p < .01$. As such, Hypothesis 2 was not supported, as the Avoidance subscale score did not significantly predict the female partners' relationship satisfaction scores. In the final analysis, the female partners Re-experiencing subscale score accounted for 13% of the variance in their relationship satisfaction scores.

Female partners' individual symptoms predicting soldiers' relationship satisfaction

In testing Hypothesis 3, when female partners PPTSD-R subscales (Arousal, Avoidance, and Re-experiencing) were entered as independent variables, Arousal scores significantly predicted the soldiers' relationship satisfaction (DAS) scores, $R^2 = 0.15$, $Adj\ R^2 = 0.13$; $F\ (1,41) = 7.04$, $p < .05$. As such, Hypothesis 3 was also not supported, as the Avoidance subscale scores did not significantly predict soldiers' relationship satisfaction scores. The results indicated that the female partners' Arousal subscale scores accounted for 13% of the variance in the soldiers' relationship satisfaction scores.

CHAPTER 4 - Discussion

Previous research has focused on the systemic impact of trauma, manifested both in partner psychological difficulties (Arzi et al., 2000; Lev-Wiesel & Amir, 2001; Mikulincer et al., 1995; Solomon et al., 1992), and influences to the couple relationship (Broman et al., 1996; Riggs et al., 1998; Whiffen & Oliver, 2004). Indeed, studies indicate that trauma reaches outside of the bounds of its primary victims, influencing those in the victim's relational vicinity, and perhaps most particularly, intimate relationships.

Although much analysis has been conducted on the influence of primary trauma on soldiers, little research has addressed the influence of trauma in the spouses/partners of soldiers. Specifically, the current literature has failed to address the effects of spouses'/partners' primary trauma on their intimate relationships in recent military couples. Results from this study indicate that female primary trauma, particularly PTSD symptoms, has an influence on levels of relationship satisfaction, both for female partners and soldiers.

Hypothesis 1 was partially supported, as trauma symptom scores in female partners predicted lower satisfaction for themselves and the soldiers. As such, the current study parallels previous research on the systemic effects of trauma (e.g., Broman et al., 1996; Riggs et al., 1998; Whiffen & Oliver, 2004), as results indicated that primary symptoms have a negative relational impact.

Previous research has illustrated the influence that avoidance symptoms can have on relationship satisfaction. Specifically, researchers have found that components of emotional numbing or avoidance can negatively impact relationship satisfaction, including families in military settings (Cook et al., 2004; Galovski & Lyons, 2004; Riggs, et al. 1998). Perhaps avoidance symptoms cause veterans to become socially isolative, thereby influencing their partners to withdraw from various social activities (Sherman et al., 2005). Emotional withdrawal within the relationship may then leave partners feeling as if they cohabitate rather than share an intimate relationship (Sherman et al., 2005). As such, it was theorized that the avoidance symptoms of female partners in the current study would most significantly impact relational satisfaction, both for partners and the soldiers.

Surprisingly, the results indicated that female partners' avoidance symptoms did not significantly predict lower relationship satisfaction, either for themselves or the soldiers. Hypothesis 2 was not supported as female partners' re-experiencing rather than arousal symptoms were found to most significantly predict their own levels of relationship satisfaction. Likewise, Hypothesis 3 was not supported as results indicated that female partners' arousal symptoms, rather than avoidance symptoms, were most indicative of low levels of relationship satisfaction for soldiers. Though not as predicted,

these results provide additional empirical support that individual trauma symptoms negatively affect relational satisfaction in both trauma survivors and their partners.

There are several possible explanations that shed light on the results of the current study. Perhaps female partners of soldiers are reminded of their own traumatic experiences as they watch the soldiers struggle upon return from war and listen to stories of their experiences in combat. This "re-experiencing" of traumatic events may then lead female partners to believe the relationship is an emotionally unsafe place, thereby decreasing the level of satisfaction felt within it. Meanwhile, soldiers may experience their wives' level of sensitivity or "arousal" in the marital relationship as non-soothing. If wives are emotionally reactive due to their own trauma symptoms, it may lead soldiers to feel the relationship is not as neutral or safe as they had hoped in their desire for a reprieve from war. As such, female partners' level of arousal could negatively influence soldiers' level of relational satisfaction.

Other reasons for the results of the current study could be due to a possible sensitivity female trauma victims have for re-experiencing symptoms as they appear in some instances to report them more often (Breslau, Chilcoat, Kessler, Peterson, & Lucia, 1999; Zlotnick, Zimmerman, Wolfsdorf, & Mattia, 2001) than other trauma symptoms. Perhaps female partners of the current study were likewise more sensitive to their re-experiencing symptoms, including the possible ways these symptoms negatively influenced their levels of relationship satisfaction.

Likewise, research may shed light onto reasons why female partners' level of arousal was indicative of relationship satisfaction for the soldiers. Perhaps the PTSD symptoms experienced by soldiers (Hoge et al., 2004) make them more reactive to

arousal symptoms in their partners. Indeed, soldiers may be used to being on the "offense" (Armstrong et al., 2006, p. 183) and alert of the actions of those around them, ready to respond. Consequently, the emotional reactivity of their spouses may feel like an attack that needs to be countered. Further, anger appears to be a prevalent emotion experienced by soldiers during combat (Reyes & Hicklin, 2005), which could make them more reactive to the emotional arousal of their spouse.

The current study explores an important aspect of research regarding military families and the emotional/psychological components that may influence wellbeing. For some time, the professional and empirical literature has focused on the implications of soldier trauma, particularly during the re-integration phase when soldiers are reunited with their loved ones and begin again the rhythms of family life. Similarly, there has been increasing focus on the effects of soldiers' war trauma on their female partners (Arzi et al., 2000; Dirkzwager et al., 2005; Lev-Wiesel & Amir, 2001; Mikulincer et al., 1995; Solomon et al., 1992), but this literature clearly emphasizes the "secondary trauma" experienced by female partners, often not directly addressing or distinguishing their own primary trauma. Though previous research has recognized the strain associated with partners dealing with primary and secondary trauma (Maloney, 1988), the implications of their primary experiences remained unexamined.

Understanding female primary trauma may be important given the seeming sensitivity females have for developing PTSD (Breslau et al., 1991; Breslau et al., 1998; Kessler et al., 1995; Stein et al., 1997), and experiencing symptoms that are more chronic in nature (Breslau et al., 1998; Breslau & Davis, 1992). However, the necessity of understanding their experiences of primary trauma may go outside of their vulnerability

to it and extend to the nature of their roles within relationships. Specifically, female civilian partners may play a key role in helping military families to function well throughout the deployment process given their assumption of major family responsibilities (Apellaniz, 1998; Armstrong et al., 2006; Maloney 1988). Further, their emotional wellbeing may be considered a "family affair" due to the role that family relationships serve in helping individuals cope with trauma (Barrett & Mizes, 1988; Beiser, Turner, & Ganesan, 1989) including returning soldiers (Armstrong et al., 2006). Indeed, civilian female partners appear to play a crucial part in ironing out the wrinkles war can rage in family life. Yet despite this seeming level of influence on family functioning, little is known about their individual needs resulting from their own trauma experiences.

Perhaps this lack of research parallels their own self-awareness processes. Responsibilities left to female partners of soldiers may be immense during the deployment phase, making it difficult for them to budget time to consider their own needs. This tendency may become even more intense upon the soldiers' return given the possibility that the soldier may be experiencing psychological symptoms resulting from war experiences (Barrett & Mizes, 1988; Hoge et al., 2004). Research on female partners of soldiers seems to mirror this process as it focuses on partner symptoms *in light of* the soldiers' trauma, centering on secondary traumatization rather then on primary trauma experiences. Yet the needs of female partners springing from traumatic experiences may reach beyond those considered to be due to secondary traumatization. Perhaps her own depression symptoms spring from deeper sources than her seeming inability to help her husband stop having nightmares or her exposure to his anger. In the human body,

secondary infections can mask primary infections making them harder to see, notice, and attend to. However, these secondary infections spring from the primary source and continue to resurface until the root of the infection is resolved and healed. Likewise, secondary trauma may mask more primary trauma concerns and needs, making them difficult to see, notice, and attend to. Indeed, if the source of the problem or the root is not analyzed and considered, there may be a risk of overlooking core components of healing for female partners. Easing secondary traumatization symptoms may not eradicate primary concerns.

Consequently, female partners of soldiers may have unique needs in light of the stressors that occur throughout the deployment process. Given the straining nature of such separations (Black, 1993; Segal, 1986) and the seeming increase in responsibilities spouses/partners often assume (Apellaniz, 1998; Armstrong et al., 2006; Maloney, 1988), it may be argued that female partners themselves fight battles at home in keeping family life afloat while the soldier is deployed. In light of this level of stress, their needs for support programs and interventions may parallel that experienced by returning soldiers. Many resources work to help soldiers understand and recognize within themselves the symptoms of PTSD (National Center for PTSD, 2005a; U. S. Department of Defense, n.d.a) and other psychological difficulties (National Center for PTSD, 2005a). Further, resources stress to soldiers the importance of understanding that family members may be influenced by their psychological difficulties and that seeking treatment could be beneficial (National Center for PTSD, 2005a).

Although there are resources available to spouses addressing ways to effectively deal with the soldier's absence and the subsequent increase in responsibilities (e.g.

Operation Ready, 2002; *Spouse's handbook*, 2003), these resources either fail to or minimally emphasize the importance of personal emotional awareness or the possible need to seek intervention for psychological concerns. Indeed, it seems that spouses/partners are strongly encouraged to seek understanding of their soldier's emotional concerns (National Center for PTSD, 2005b), while the same emphasis is not placed on understanding their own. As such, in a whirlwind of "to-do's" ranging from physical health care, financial security, home safety, and possible relocations, it may be easy for overwhelmed caretakers to overlook their own needs. Consequently, partners may benefit from resources and services that more specifically emphasize their emotional functioning and the influence that their own primary trauma experiences have in individual and relationship functioning.

For instance, Family Readiness Groups (Mancini, 2006) could have a section dedicated to helping partners of soldiers tune into and ask questions about their own emotional wellbeing. How overwhelmed do they feel? Are they more reactive to their children than they used to be? Do they have a hard time sleeping? Are they beginning to feel resentful? "Tip sheets" (U. S. Department of Defense, n.d.a; U. S. Department of Defense, n.d.b) and guidebooks (Operation Ready, 2002; *Spouse's Handbook*, 2003) given to family members by military leaders could likewise more strongly emphasize the importance of self-care for the partners, as well as specific opportunities for clinical interventions, such as community counseling centers, chaplain services, and other options available in the area. Pre-deployment meetings attended by military families could further emphasize the importance of partner self-care as couples learn together prior to deployment specific issues that need consideration and attendance. As a whole, there

seems a need for the psychological concerns of partners of soldiers to be more strongly considered. Indeed, given their influence on waging the war at home, it makes sense to fully equip them with the tools necessary in fighting a successful emotional battle.

Although the current study provides new information about the impact of individual trauma symptoms and relationship satisfaction, future empirical research is needed in this area of traumatic stress. Several limitations in the study attest to the limited generalizability of its results. For instance, this sample of this study was small and homogeneous, consisting of individuals from a considerably limited geographic area. Further, the average DAS scores for the sample were high (i.e., over 100 for both soldiers and partners; Eddy, Heyman, & Weiss, 1991) and included young couples who were currently married or in a committed relationship, which indicates, overall, a highly satisfied sample of couples. Future research with a clinical sample of couples may yield stronger results related to symptom severity. As such, study results may not be generalizable to individuals experiencing severe trauma symptoms, severe dissatisfaction with their relationship, or those who have been married longer and experienced other deployments or separations.

There are several limitations related to the military sample included in the study. The study provided data on a limited number of predominately male active duty soldiers and their female partners recruited from two military installations that were selected due to geographic convenience. As a result of the recruitment and because the sample included a disproportionate number of European American, older, and more educated military officers, the soldiers in the current study may not be a representative sample of a broader Army population. Also, few participants were members of National Guard or

Reserve Units that were deployed and no female soldiers were represented in the sample. Although we attempted to actively recruit participants from Guard and Reserve units through newspaper advertisements and direct contacts, there was limited participation from these groups, which should be addressed in future research.

In sum, the results of the current study indicate the importance of awareness regarding female partner primary trauma given its influence on relationship satisfaction within military couples. How are couples to cope if one of their greatest resources is the very thing that suffers? Likewise, how are military families to endure and adjust to the demands of war when those responsible for maintaining the home are likewise dealing with emotional warfare? Indeed, the emotional condition of military families can no longer be considered solely within the realm of soldier trauma or secondary traumatization, but instead include consideration of the influence of female primary traumatic experiences.

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Appendix A - IRB Approval Form

K-STATE
Kansas State University
University Research
Compliance Office
203 Fairchild Hall
Lower Mezzanine
Manhattan, KS 66506-1103
785-532-3224
fax: 785-532-3278
http://www.ksu.edu/research/comply

TO: Briana Nelson-Goff
FSHS
238 Campus Creek Complex

Proposal Number: 3769

FROM: Rick Scheidt, Chair
Committee on Research Involving Human Subjects

DATE: March 13, 2006

RE: Approval of Proposal Entitled, "Primary and secondary post-traumatic stress in couples."

The Committee on Research Involving Human Subjects has reviewed your proposal and has granted full approval. **This proposal is approved until** March 13, 2009.

In giving its approval, the Committee has determined that:

☒ There is no more than minimal risk to the subjects.
☐ There is greater than minimal risk to the subjects.

This approval applies only to the proposal currently on file. Any change affecting human subjects must be approved by the Committee prior to implementation. All approved proposals are subject to continuing review at least annually, which may include the examination of records connected with the project. Announced in-progress reviews will be performed during the course of this approval period by a member of the University Research Compliance Office staff. Injuries or any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if appropriate and if the subjects are KSU students, to the Director of the Student Health Center.

When deemed appropriate by the IRB and prior to involving human subjects, properly executed informed consent must be obtained from each subject or from an authorized representative, and documentation of informed consent must be kept on file for at least three years after the project ends. Each subject must be furnished with a copy of the informed consent document for his or her personal records. The identification of particular human subjects in any publication is an invasion of privacy and requires a separately executed informed consent.

It is important that your human subjects project is consistent with submissions to funding/contract entities. It is your responsibility to initiate notification procedures to any funding/contract entity of any changes in your project that affects the use of human subjects.

Appendix B - Informed Consent Form

KANSAS STATE UNIVERSITY

INFORMED CONSENT TEMPLATE

PROJECT TITLE:	Primary and Secondary Post Traumatic Stress in Couples
PRINCIPAL INVESTIGATOR: CO-INVESTIGATOR(S):	Dr. Briana S. Nelson Goff
CONTACT AND PHONE FOR ANY PROBLEMS/QUESTIONS:	322 Justin Hall, Kansas State University, Manhattan, KS 66506 785-532-1490
IRB CHAIR CONTACT/PHONE INFORMATION:	Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 1 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224 Jerry Jaax, Associate Vice Provost for Resarch Compliance and University Veterinarian, 1 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224
SPONSOR OF PROJECT:	Kansas State University Office of Research and Sponsored Programs, University Small Research Grant Program
PURPOSE OF THE RESEARCH:	We are seeking married, co-habiting, dating and same sex couples who have been in a committed relationship for at least one (1) year in which one or both partners have experienced trauma. These experiences may include war trauma, physical or sexual abuse during childhood or as an adult, traumatic accidents, or similar experiences that the person views as particularly difficult or traumatic. The purpose of the research is to gain an understanding of how these past experiences impact marital and couple relationships.
PROCEDURES OR METHODS TO BE USED:	The research will be conducted through a brief questionnaire and an interview, and will require approximately 1 ½ to 2 hours of time per person. All participating couples will receive $50 for their participation in the research.
ALTERNATIVE PROCEDURES OR TREATMENTS, IF ANY, THAT MIGHT BE ADVANTAGEOUS TO SUBJECT:	N/A
LENGTH OF STUDY:	Approximately 1.5-2 hours
RISKS ANTICIPATED:	Potential risks include: 1) an increased awareness of interpersonal issues within the participants'

relationships,
2) an increased awareness of possible need for more professional assistance, and 3) increased psychological distress from discussion previous traumatic experiences.

BENEFITS ANTICIPATED: Potential benefits include:
1) increased awareness of the impact of trauma on the individuals
2) increased awareness of the impact of trauma on the interpersonal relationship.

EXTENT OF CONFIDENTIALITY: The questionnaires have a code number for tracking, but no personal identifying information will be included in order to maintain anonymity and confidentiality. The questionnaires will only be seen by the researcher and her assistants. All information is confidentail and not part of your military records or KSU Family Center Clinic file.

IS COMPENSATION OR MEDICAL TREATMENT AVAILABLE IF INJURY OCCURS:

PARENTAL APPROVAL FOR MINORS: N/A

TERMS OF PARTICIPATION: I understand this project is research, and that my participation is completely voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled.

I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.

(Remember that it is a requirement for the P.I. to maintain a signed and dated copy of the same consent form signed and kept by the participant

Participant Name: _____ **Date:**

Participant Signature: _____ _____

Witness to Signature: (project staff) _____ **Date:** _____

Appendix C - Common Responses to Traumatic Events

Although trauma affects people differently, there are some common reactions that you may experience. These signs and symptoms may begin immediately, or you may feel fine for a couple of days or even weeks, then suddenly be hit with a reaction. The most important thing to remember is that these reactions are quite normal. Although it may seem abnormal, it is very normal for people to experience emotional "after shocks" following experiencing or remembering a traumatic event.

Some common responses to traumatic events are:

PHYSICAL REACTIONS
Insomnia
Fatigue
Hyperactivity
Pains in the neck or back
Headaches
Heart palpitations or pains in the chest*
Dizzy spells'
Appetite changes

EMOTIONAL REACTIONS
Flashbacks or "reliving" the event
Jumpiness; tendency to startle
Irritability
Anger
Feelings of anxiety/helplessness
Feeling vulnerable
Feeling overwhelmed
Low motivation, listlessness

*If symptoms persist, consult a physician

EFFECTS ON PRODUCTIVITY
- Inability to concentrate
- Increased incidence of errors
- Memory lapses
- Increased absenteeism
- Tendency to overwork/underwork

Usually, the signs and symptoms of trauma will lessen with time. If you are concerned about your reaction, note the specific symptoms that worry you. For each symptom, note the:
- *Duration* – Normally, trauma reactions will grow less intense and disappear within a few weeks.
- *Intensity* – If the reaction interferes with your ability to carry on your life normally, you may want to seek help.

After a Traumatic Incident: Things to try

- Physical exercise alternated with relaxation may help with some of the symptoms and reactions. Consult your doctor or nurse if they persist.
- You are normal and having normal reactions. Don't label yourself as abnormal.
- Talk to people, such as family members, friends or co-workers; talk is the most healing medicine.
- Spend time with others. Resist the tendency to isolate.

Appendix D - Debriefing Statement

Thank you for participating in the study "Primary and Secondary Post-Traumatic Stress in Couples." The primary purpose of this study is to determine how past traumatic experiences, like childhood abuse, war trauma, traumatic accidents, or similar experiences, affect the current couple relationships. It is the researcher's experience that past traumatic events affect not only the primary survivor, but also those close to the survivor (family members, spouse/partner, children, friends). Problems related to isolation from others, communication problems, anxiety, depression, anger, memories of the trauma, and guilt are just a few of the issues trauma survivors report. Those close to the trauma survivor also experience these difficulties through interacting with the survivor; however, the effects of traumatic events are often ignored, for both the survivor and the partner.

It is the researcher's hope that this study will shed some light on how relationships are affected by trauma. Both partners were asked to fill out a questionnaire about what traumatic events they have experienced and the current effects of those past experiences, as well as satisfaction with their relationship.

By completing this study, you have contributed to a project that will provide information about how to help individuals and couples who have experienced a traumatic event. It is hoped that this information will assist therapists in finding ways to be more effective in working with the trauma survivor, the spouse/partner, and others close to the survivor. Thank you for your participation in this research. Sometimes participation in research projects, particularly a project that asks about sensitive information, can be distressing for participants. If your participation in this study has caused you concerns, anxiety, or otherwise distressed you, please be aware that you may contact the following resources for assistance:

Fort Riley:	Family Life Chaplain Office 239-3359 Soldier and Family Support Center 239-9435 Mental Health 239-7208
Junction City:	Pawnee Mental Health Center 762-5250 Konza Prairie Community Health Center 238-4711
Manhattan:	Pawnee Mental Health Center 587-4300 KSU Family Center 532-6984

If you have any questions about the study, or would like to receive a report of this research when it is completed, please contact Briana S. Nelson Goff, Ph.D. at (785) 532-1490.

Again, thank you again for your participation!

Appendix E - Study Questionnaire

UNDERSTANDING TRAUMATIC EVENTS
(Confidential)

Date _____

Please answer the following questions:

1. Gender: _____ Male _____ Female

2. Age: _____

3. What is your racial/cultural/ethnic origin? (Check one)
   _____ American Indian or Alaska Native
   _____ Asian or Pacific Islander
   _____ African-American (Black), not of Hispanic origin
   _____ Mexican-American (Hispanic)
   _____ European-American (White)
   _____ Other (Please Identify)_____

4. What is your current relationship status? (Check one)
   _____ Married How Long? _____
   _____ Dating How Long? ____
   _____ Separated How Long? _____
   _____ Divorced How Long? _____
   _____ Remarried How Long? _____
   _____ Living together How Long? _____
   _____ Other (please specify) _____

5. Total number of marriages (<u>including</u> current marriage) _____

6. What is your highest level of education that you have completed? (Check one)
   _____ No formal education _____ Some college
   _____ Some grade school _____ Completed college
   _____ Completed grade school _____ Some graduate work
   _____ Some high school _____ Completed master's degree
   _____ Completed high school _____ Completed doctorate

7. What is your religious preference? (Check one)
   _____ Protestant (e.g., Baptist, Lutheran, etc.) _____
   _____ Catholic
   _____ Jewish
   _____ None
   _____ Non-denominational
   _____ Other (Please specify) _____

8. Employment: (Check the one that most describes your status)
   _____ Employed full-time _____ Retired
   _____ Employed part-time _____ Full-time student
   _____ Unemployed (Not disabled) _____ Part-time student
   _____ Unemployed (Due to disability) _____ Full-time homemaker

9. Which category would include your family income, from all sources, before taxes last year? (check one)

_____ Below $ - 9,999	_____ $40,000 - $49,999	_____ $80,000 - $89,999
_____ $10,000 - $19,999	_____ $50,000 - $59,999	_____ $90,000 - $99,999
_____ $20,000 - $29,999	_____ $60,000 - $69,999	_____ $100,000 - Above
_____ $30,000 - $39,999	_____ $70,000 - $79,999	

10. Psychological:
    1. Have you had any psychological problem(s) (e.g., anxiety, depression, schizophrenia, etc.) for which you have seen a mental health professional at least once every 2 months:
    a. During the last year? Yes _____ No _____
    If yes, please specify the problem.
    _____
    b. During the last 2 years? Yes _____ No _____
    If yes, please specify the problem.
    _____
    c. During the last 5 years? Yes _____ No _____
    If yes, please specify the problem.
    _____

11. Relationship:
    1. Have you had any relationship problem(s) (e.g., communication, parenting, intimacy, etc.) for which you have seen a therapist at least once every 2 months:
    a. During the last year? Yes _____ No _____
    If yes, please specify the problem.
    _____
    b. During the last 2 years? Yes _____ No _____
    If yes, please specify the problem.
    _____
    c. During the last 5 years? Yes _____ No _____
    If yes, please specify the problem.
    _____

11a. *Military*: Please describe your 1st deployment to Iraq/Afghanistan/Other (if you have *not* been deployed, leave blank):

1. Dates of deployment _____
2. Location _____
3. Date you returned home _____
4. Please briefly describe your job while deployed_____
_____

11b. *Military*: If you have been involved in additional deployments to Iraq/Afghanistan/Other, please describe those deployments here (if you have *not* been deployed, leave blank):

5. Dates of deployment _____
6. Location _____
7. Date you returned home _____
8. Please briefly describe your job while deployed_____
_____

****

Below is a list of problems and complaints that people sometimes have. Please circle the best answer for each of the following problems as to how much they are NOW a concern to you:

Problems concerning yourself:	Never	Rarely	Sometimes	Often	Always
12. chronic illness/pain	1	2	3	4	5
13.depression	1	2	3	4	5
14. anxiety	1	2	3	4	5
15. stress	1	2	3	4	5
16. rape	1	2	3	4	5
17. relation-ship problem	1	2	3	4	5
18. physical problem	1	2	3	4	5
19. excessive alcohol/drugs	1	2	3	4	5
20. family relationships	1	2	3	4	5
21. sexual problems	1	2	3	4	5
22. parenting	1	2	3	4	5
23. self-esteem	1	2	3	4	5
24. lack of assertiveness	1	2	3	4	5
25. suicidal thoughts	1	2	3	4	5
26. anger	1	2	3	4	5
27. sexual addiction	1	2	3	4	5
28. emotional childhood abuse	1	2	3	4	5
29. physical childhood abuse	1	2	3	4	5
30. sexual childhood abuse/incest	1	. 2	3	4	5
31. other (please specify):	1	2	3	4	5

Problems concerning <u>your relationship with your partner</u>:	Never	Rarely	Sometimes	Often	Always
32. poor communication	1	2	3	4	5
33. argue about finances	1	2	3	4	5
34. not enough time together	1	2	3	4	5
35. fighting	1	2	3	4	5
36. physical violence	1	2	3	4	5
37. excessive alcohol/drugs	1	2	3	4	5
38. refuses sex often	1	2	3	4	5
39. demands sex too often	1	2	3	4	5
40. physical sexual problem (impotence, painful intercourse, etc.)	1	2	3	4	5
41. parenting differences	1	2	3	4	5
42. partner too controlling	1	2	3	4	5
43. different values	1	2	3	4	5
44. difficulties with in-laws/extended family	1	2	3	4	5
45. other (please specify):	1	2	3	4	5

****

The next section is comprised of a variety of traumatic events that you may have experienced. For each of the following questions, please indicate whether or not you have experienced the event. If you have not experienced the event, circle "**No**" and go to the next numbered item. If you have experienced the event, circle "**Yes.**"

46. As a child, were you the victim of physical abuse?	YES	NO
47. As a child, were you the victim of sexual abuse?	YES	NO
48. Did you ever serve in a war zone where you received hostile incoming fire from small arms, artillery, rockets, mortars, or bombs?	YES	NO
49. Were you in serious danger of losing your life or of being seriously injured during military service?	YES	NO
50. Did you ever receive news of the mutilation, serious injury, or violent or unexpected death of someone close to you during military service?	YES	NO
51. Did you witness someone who was mutilated, seriously injured or violently killed during military service?	YES	NO
52. Did you ever observe others or participate in atrocities, such as torturing prisoners, mutilating enemy bodies, or harming civilians?	YES	NO
53. Were you ever a Prisoner of War?	YES	NO
54. Have you been in or witnessed a serious industrial, farm, or car accident, or a large fire or explosion?	YES	NO

55. Have you been in a natural disaster such as a tornado, hurricane, flood, or major earthquake?	YES	NO
56. Have you been a victim of a violent crime such as rape, robbery, or assault?	YES	NO
57. As an adult, have you had any unwanted sexual experiences that involved the threat or use of force?	YES	NO
58. As an adult, have you ever been in a relationship in which you were abused either physically or otherwise?	YES	NO
59. Have you witnessed someone who was mutilated, seriously injured or violently killed (**NOT** related to military experiences)?	YES	NO
60. Have you been in serious danger of losing your life or of being seriously injured (**NOT** related to military experiences)?	YES	NO
61. Have you received news of the mutilation, serious injury, or violent or unexpected death of someone close to you (**NOT** related to military experiences)?	YES	NO
62. Have you ever experienced any other very traumatic event like these? Please describe the event. _____ _____	YES	NO
63. If you answered "**NO"** to all the questions above, please describe your **MOST** traumatic event. _____ _____		

From the previous list of events, please put the number of the event that you consider your MOST traumatic event in the following blank. _____

****

The next section asks about your reactions to your MOST traumatic event, which you listed at the bottom of the previous page. Please answer each question for how often each reaction **OCCURRED** during the previous month.

In **the last month**, how often:	Not at all		Sometimes		Often
64. were you bothered by memories or thoughts of the event when you didn't want to think about it?	1	2	3	4	5
65. have you had upsetting dreams about the event?	1	2	3	4	5
66. have you suddenly felt as if you were experiencing the event again?	1	2	3	4	5
67. did you feel very upset when something happened to remind you of the event?	1	2	3	4	5
68. did you avoid activities or situations that might remind you of the event?	1	2	3	4	5
69. did you avoid thoughts or feelings about the event?	1	2	3	4	5
70. did you have difficulty remembering important aspects of the event?	1	2	3	4	5
71. did you react physically (heart racing, breaking out in a sweat) to things that reminded you of the event?	1	2	3	4	5

Since the event….	Not at all		Sometimes		Often
72. have you lost interest in one or more of your usual activities (work, hobbies, entertainment)?	1	2	3	4	5
73. have you felt unusually distant or cut off from people?	1	2	3	4	5
74. have you felt emotionally "numb" or unable to respond to things emotionally the way you used to?	1	2	3	4	5
75. have you been less optimistic about your future?	1	2	3	4	5
76. have you had more trouble sleeping?	1	2	3	4	5
77. have you been more irritable or angry?	1	2	3	4	5
78. have you had more trouble concentrating?	1	2	3	4	5
79. have you found yourself watchful or on guard, even when there was no reason to be?	1	2	3	4	5
80. are you more jumpy or easily startled by noises?	1	2	3	4	5

****

The next section includes a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, please circle one of the numbered spaces to the right that best describes **HOW MUCH THAT PROBLEM HAS BOTHERED OR DISTRESSED YOU IN THE PAST TWO MONTHS**. Circle only one numbered space for each problem.

How often have you experienced the following in the **last two months**:	Never			Often
81. Headaches	0	1	2	3
82. Insomnia (trouble getting to sleep)	0	1	2	3
83. Weight loss (without dieting)	0	1	2	3
84. Stomach problems	0	1	2	3
85. Sexual problems	0	1	2	3
86. Feeling isolated from others	0	1	2	3
87. "Flashbacks" (sudden, vivid, distracting memories)	0	1	2	3
88. Restless sleep	0	1	2	3
89. Low sex drive	0	1	2	3
90. Anxiety attacks	0	1	2	3
91. Sexual overactivity	0	1	2	3

How often have you experienced the following in the **last two months**:	Never			Often
92. Loneliness	0	1	2	3
93. Nightmares	0	1	2	3
94. "Spacing out" (going away in your mind)	0	1	2	3
95. Sadness	0	1	2	3
96. Dizziness	0	1	2	3
97. Not feeling satisfied with your sex life	0	1	2	3
98. Trouble controlling your temper	0	1	2	3
99. Waking up early in the morning and can't get back to sleep	0	1	2	3
100. Uncontrollable crying	0	1	2	3
101. Fear of men	0	1	2	3
102. Not feeling rested in the morning	0	1	2	3
103. Having sex that you didn't enjoy	0	1	2	3
104. Trouble getting along with others	0	1	2	3
105. Memory problems	0	1	2	3
106. Desire to physically hurt yourself	0	1	2	3
107. Fear of women	0	1	2	3
108. Waking up in the middle of the night	0	1	2	3
109. Bad thoughts or feelings during sex	0	1	2	3
110. Passing out	0	1	2	3
111. Feeling that things are "unreal"	0	1	2	3
112. Unnecessary or over-frequent washing	0	1	2	3
113. Feelings of inferiority	0	1	2	3
114. Feeling tense all the time	0	1	2	3
115. Being confused about your sexual feelings	0	1	2	3
116. Desire to physically hurt others	0	1	2	3

How often have you experienced the following in the **last two months**:	Never			Often
117. Feelings of guilt	0	1	2	3
118. Feeling that you are not always in your body	0	1	2	3
119. Having trouble breathing	0	1	2	3
120. Sexual feelings when shouldn't have them	0	1	2	3

* * * * * * * * * * *

Most persons have disagreements in their relationships. Please indicate below by circling the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
121. Handling finances	1	2	3	4	5	6
122. Matters of recreation	1	2	3	4	5	6
123. Religious matters	1	2	3	4	5	6
124. Demonstration of affection	1	2	3	4	5	6
125. Friends	1	2	3	4	5	6
126. Sex relations	1	2	3	4	5	6
127. Conventionality (correct or proper behavior)	1	2	3	4	5	6
128. Philosophy of life	1	2	3	4	5	6
129. Ways of dealing with parents or in-laws	1	2	3	4	5	6
130. Aims, goals, and things believed important	1	2	3	4	5	6
131. Amount of time spent together	1	2	3	4	5	6
132. Making major decisions	1	2	3	4	5	6

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
133. Household tasks	1	2	3	4	5	6
134. Leisure time interests and activities	1	2	3	4	5	6
135. Career decisions	1	2	3	4	5	6

	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
136. How often have you discussed or considered divorce, separation, or terminating your relationship?	1	2	3	4	5	6
137. How often do you or your partner leave the house after a fight?	1	2	3	4	5	6
138. In general, how often do you think that things between you and your partner are going well?	1	2	3	4	5	6
139. Do you confide in your partner?	1	2	3	4	5	6
140. Do you regret that you married/entered the relationship with your partner?	1	2	3	4	5	6
141. How often do you and your partner quarrel?	1	2	3	4	5	6
142. How often do you and your partner "get on each other's nerves?"	1	2	3	4	5	6

	Every Day	Almost every day	Occasionally	Rarely	Never
143. Do you kiss your partner?	1	2	3	4	5
144. Do you and your partner engage in outside interests together?	1	2	3	4	5

How often would you say the following events occur between you and your partner?	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
145. Have a stimulating exchange of ideas	1	2	3	4	5	6
146. Laugh together	1	2	3	4	5	6

How often would you say the following events occur between you and your partner?	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
147. Calmly discuss something	1	2	3	4	5	6
148. Work together on a project	1	2	3	4	5	6

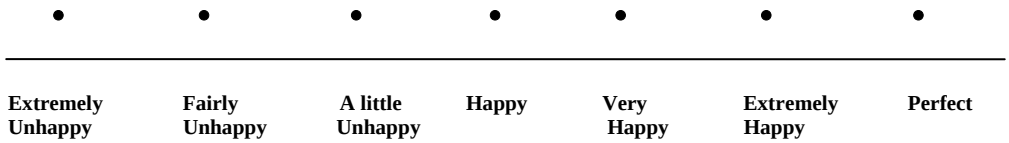
There are some things about which couples sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks. (CHECK yes or no).

Yes No

149. Being too tired for sex. _____ _____

150. Not showing love. _____ _____

151. The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy," represents the degree of happiness in most relationships. Please circle the dot which best describes the degree of happiness, all things considered, of your relationship.



152. Which of the following statements best describes how you feel about the future of your relationship?

_____ I want desperately for my relationship to succeed, and would go to almost any length to see that it does.

_____ I want very much for my relationship to succeed, and will do all I can to see that it does.

_____ I want very much for my relationship to succeed, and will do my fair share to see that it does.

_____ It would be nice if my relationship succeeded, but I can't do much more than I am doing now to keep the relationship going.

_____ It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.

_____ My relationship can never succeed, and there is no more that I can do to keep the relationship going.

****

Your contribution to this effort is greatly appreciated
Thank You!