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The Role of Hardiness in Moderating Parenting Stress in Iraq and Afghanistan War Veterans

Victoria Jane Tomassetti-Long
University of Southern Mississippi

The University of Southern Mississippi

THE ROLE OF HARDINESS IN MODERATING PARENTING STRESS IN IRAQ AND AFGHANISTAN WAR VETERANS

by

Victoria Jane Tomassetti

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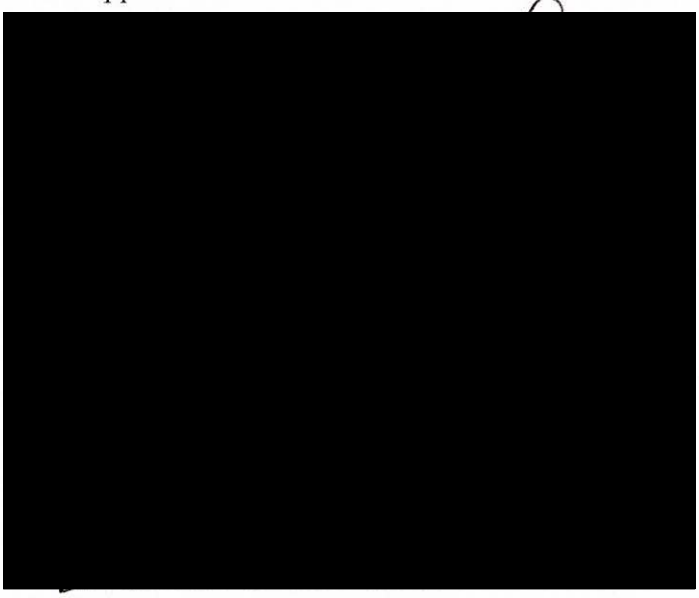

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ABSTRACT

ROLE OF HARDINESS IN MODERATING PARENTING STRESS IN IRAQ AND AFGHANISTAN WAR VETERANS

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There is a link between parenting stress and negative child outcomes. Research has focused on a number of risk and protective factors that may influence parental practices and child behavior. Parental trauma has been identified as a risk factor for increased parental stress. Previous research has demonstrated a link between combat exposure and parenting stress in veterans of war. Hardiness, a personality variable that describes an individual's sense of commitment, control, and challenge in light of life stress, has been identified as a protective factor that buffers against the development of psychological symptoms in combat veterans. The current study assessed the relationship between combat- related PTSD symptomatology and parenting stress, as well as the moderating influence of hardiness in this relationship in a sample of 117 modern veterans. Results supported hypotheses predicting a positive relationship between PTSD symptomatology and parenting stress and a negative relationship between hardiness and parenting stress. Hardiness was not found to moderate the relationship between PTSD symptomatology and parenting stress.

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CHAPTER I

INTRODUCTION

A growing body of literature has reported on the mental health status of veterans serving in the current wars in Iraq and Afghanistan. As these wars continue into their eighth year, over 200,000 military personnel are currently serving in Iraq and Afghanistan; many will return home from a deployment in a combat zone (Department of Defense, 2008). Early data suggests that11 to 18% of these veterans experience problems related to PTSD upon their return home and the risk for PTSD increased with the number of firefights experienced (Hoge et al., 2004; Erbes, Westermeyer, Engdahl, & Johnsen 2007). Others have reported rates as high as 30% (Lapierre, Schwegler, & LaBauve 2007). Veterans with PTSD were found to experience increased impairment in social functioning and emotional well being (Erbes et al., 2007).

Data from both civilian and military samples has shown a relationship between PTSD symptomatology and parenting problems including increased parental stress and decreased satisfaction with the parental role (Lauterbach et al., 2007; Ruscio, Weathers, King, & King, 2002). Individuals with PTSD have also reported more frequent use of physical discipline (Cohen, Hien, & Batchelder, 2008) and higher levels of parent-child aggression (Lauterbach et al., 2007).

Hardiness, a personality construct that describes an individual's sense of commitment, control, and challenge in light of life stress (Kobasa, Maddi, & Kahn, 1982) has been shown to differentially influence the relationship between life stressors and subsequent physical and mental health symptomatology. Research with deployed military personnel has demonstrated that hardiness buffers against the development of

psychological symptoms such as depression (Adler & Dolan, 1996; Bartone, 1999). No research has examined whether the protective effects of hardiness extend to parenting. The aim of the current study was to identify a link between combat-related PTSD symptomatology and parenting stress, as well as the protective influence of hardiness, in veterans of the current wars in Iraq and Afghanistan who are parents of young children.

Parenting Stress

Several factors have been linked to poor parenting outcomes. Maternal age, education and socioeconomic status level, marital status, and number of children living in the home have been examined as predictors of parenting and child behavior. In their study of mothers with young children, Fox, Platz, and Bentley (1995) found that younger mothers had lower developmental expectations of their children, were less nurturing, and reported more child behavior problems than older mothers. Younger mothers also reported more frequent use of verbal and corporal punishment than older mothers, and this finding was even larger when the number of children living in the home was more than one. Regarding marital status, the researchers found that married mothers reported less use of verbal/corporal punishment (discipline), fewer child behavior problems, and higher levels of nurturing. Positive relationships were found between use of discipline and reported child behavior problems, but differences in directions were found between groups. For example, unmarried mothers reported more child behavior problems and greater use of discipline while mothers with a college education reported fewer child behavior problems and less discipline, when compared to mothers with a high school diploma.

In a sample of children ages 2 to 6 years, enrolled in community Head Start Programs or private day care centers, parents who reported higher levels parenting stress also reported greater use of discipline and less frequent nurturing behaviors (Anthony et al., 2005). Huth-Bocks and Hughes (2008) evaluated the relationships between parenting stress and parenting behaviors in a sample of mothers who were victims of intimate partner violence. The authors found a strong, positive relationship between parenting stress and ineffective parenting behavior, as measured by parent reported laxness and over-reactivity in discipline strategies (Huth-Bocks & Hughes, 2008). Deater-Deckard and Scarr (1996) reported a positive relationship between mothers' and fathers' reports of parental stress and their reported use of physical punishment. A similar pattern was found in another study, comparing parent-reported child behavior problems and use of corporal/verbal punishment in a sample of two to five year old boys identified as either having or not having externalizing behaviors (Nicholson, Fox, & Johnson, 2005). The effect size difference between mothers of children with externalizing behaviors and mothers in the comparison group was large ($\eta^2 = .12$); mothers who reported externalizing child behaviors reported more frequent use of verbal and corporal punishment.

Parental Trauma

In addition to low socioeconomic status (Burbach, Fox, & Nicholson, 2004) and use of harsh verbal and corporal punishment (Brenner & Fox, 1998), parental trauma exposure has been associated with increased parental stress, child externalizing behaviors, parent-child aggression, and poorer quality parent-child relationships (Burbach et al., 2004; Cohen, Hien, & Batchelder, 2008; Gold et al., 2007; Lauterbach et al., 2007).

Lauterbach et al. (2007) used data from a national survey of individuals with posttraumatic stress disorder (PTSD) to investigate the impact of PTSD symptoms and support variables on overall parent-child relationship quality and parent-child aggression. Events associated with the onset of PTSD included issues such as war trauma, life-threatening experiences (experienced or witnessed), sexual assaults, and serious neglect or abuse as a child. Overall, participants with PTSD reported lower quality parent-child relationships and higher indices of parent-child aggression than those without PTSD. Additionally, among those with PTSD, higher levels of social support were predictive of higher quality parent-child relationships while increased levels of avoidance and numbing, specific symptoms of PTSD were predictive of poorer relationship quality and more parent-child aggression.

The literature on trauma and parenting has evaluated the impact of differential types of trauma on parenting beliefs, behavior, and satisfaction. Cohen, Hien, and Batchelder (2008) evaluated the relationship between maternal traumas (including childhood sexual/physical abuse, childhood witnessing, and adult partner violence) and parenting behavior. They found significant positive correlations between the trauma types and four measures of parenting behavior including child abuse potential, parental punishment, psychological aggression, and physical discipline. Mothers who had experienced one or more traumatic events reported higher levels on each of the four measures. Maternal trauma and a posttraumatic stress disorder diagnosis explained 3 to 9% of the variance in parenting behavior, even after controlling for maternal IQ, socioeconomic status, substance use disorder, and depression (Cohen et al., 2008). Due

to the interpersonal nature of the traumas experienced by the participants, it is unclear whether similar effects would result from impersonal traumas, such as combat exposure.

Another recent study evaluated parental role perceptions and behaviors immediately before and after the September 11th tragedy (Mowder, Guttman, Rubinson, & Sossin, 2006). The researchers measured changes in parents' reported perceptions of importance and frequency of several parental beliefs and behaviors. The authors found that perceptions of the importance and frequency of bonding, general welfare and protection, responsivity, and sensitivity all increased following the 9/11 attacks. In an interesting contrast to the Cohen et al. (2008) study, where discipline reportedly increased with trauma exposure, Mowder et al. (2006) found that the perceived importance of discipline decreased by a medium effect size ($\eta^2 = .06$) following the traumatic events of 9/11, although the reported frequency of discipline behavior did not change. As parents from lower SES groups are at greater risk for the development of parenting problems (Fox et al., 1995), it may be likely that the sample investigated in the Cohen et al. study were at greater risk for poor parenting while the participants in the Mowder et al. study were not.

These differential findings may also reflect the different natures of the traumas. Participants in the Cohen et al. (2008) study experienced trauma within a familial or intimate relationship. The events of 9/11 did not occur within an interpersonal context. The participants in the Mowder et al. (2006) study were neither the individual or specific targets of that trauma, nor did they have an interpersonal relationship with the perpetrators of the traumatic event. The current study aimed to evaluate the impact of a potentially unique trauma, combat-related PTSD symptomatology, on parenting.

Combat-Related PTSD

The wide ranging effects of war-zone trauma have been given considerable attention in the literature, particularly with Vietnam veteran samples. War-zone trauma has been associated with such issues as posttraumatic stress disorder (Hoge et al., 2004), depression (Renshaw, Rodrigues, & Jones, 2009), and intimate partner violence (Samper, Taft, King, & King, 2004). Some authors have specifically addressed the effects of combat-related PTSD on parent-child relationships, parenting satisfaction, and parenting stress (Jordan et al., 1992; Ruscio et al., 2002; Samper et al., 2004).

Ruscio et al. (2002) measured veteran reports of their child's misbehavior, positive sharing, disagreement, contact, and overall relationship quality in a small sample of 66 male Vietnam veterans. PTSD symptoms of reexperiencing, avoidance, numbing, and hyperarousal were evaluated. The authors found that only numbing was consistently associated with the parent-child relationship reports, explaining 11 to 29% of the variance across each of the dependent measures. Because not all participants with numbing symptoms met full PTSD criteria, the authors concluded that an absence of diagnosis does not indicate absence of trauma symptoms; rather it may be that the presence of a single symptom cluster (numbing) is predictive of parenting problems, irrespective of PTSD diagnosis (Ruscio et al., 2002).

Using data from a national survey of Vietnam veterans, Jordan et al. (1992) used a four item index to assess the extent to which veterans' children presented problems for them and how enjoyable they found their parental role, as well as their overall satisfaction with the way they were getting along with their children and their child's overall development. The authors found that compared to veterans without a PTSD

diagnosis, participants with PTSD reported greater parental problems (Jordan et al., 1992). In their discussion, the authors addressed the possibility that preexisting personal characteristics, such as childhood environment or pre-military history of psychiatric issues may contribute to veterans' current reports of family problems. The authors noted that although such variables did explain some of the variance between response groups, the results of their study suggested that combat related PTSD was more predictive of the veterans' current family problems when compared to preexisting variables.

Also utilizing data from the national study of Vietnam veterans, Samper et al. (2004) examined the relationship between specific PTSD symptoms and parenting satisfaction. In light of previous research that found emotional numbing to be predictive of parenting problems, the researchers examined symptom categories and total PTSD severity on male veterans' reports of parenting satisfaction. Consistent with previous findings by Ruscio et al. (2002) the authors found emotional numbing to be especially predictive of poor parenting satisfaction. Samper et al. (2004) also addressed the overall impact of PTSD on parenting satisfaction, noting that higher levels of PTSD were negatively associated with parenting satisfaction.

As the wars in Iraq and Afghanistan continue into their eighth year, an increasing number of troops are facing challenges as they return home. In light of the literature that reflects a relationship between combat-related PTSD and parenting in Vietnam veterans, the aim of the current study was to determine if a similar relationship exists in modern veterans. Others have pointed to the paucity of information about modern veterans' family adjustment and have encouraged researchers to explore the variables that may be unique to this population (Sheppard, Malatras, & Isreal, 2010).

A number of studies have attempted to identify specific protective factors that contribute to families' abilities to effectively deal with and overcome stress and adversity (Greeff, Vansteenwegen, & Ide, 2006). In their review of the literature on family resilience, Black and Lobo (2008) identified a number of these factors, including ample social support, family communication, and a positive outlook. Social support has been identified as a protective factor in at least one study of parental trauma (Lauterbach et al., 2007). Hardiness has also been shown to be a protective factor against physical and psychiatric symptoms in veterans deployed to a combat zone (Bartone, 1999) but its role in the parent-child context of veterans has not yet been examined. In addition to evaluating the relationship between combat-related PTSD and parenting stress, the current study aimed to determine if hardiness is an effective protective factor in this relationship. A discussion of hardiness follows.

Hardiness

Personality hardiness has been described in terms of an individual's sense of commitment, control, and challenge in light of life stress (Kobasa et al., 1982; Maddi, 2002) or "the courage and motivation to cope effectively with stressful experiences," and "permits one to face stressful events rather than deny and avoid them" (Maddi et al., 2006, p. 576). Since early studies found these dispositional components to act as a protective factor against illness in high-stress business managers and executives (Kobasa et al., 1982), hardiness, a protective personality construct, has been evaluated in numerous populations including business professionals, military personnel, and parents of chronically ill children (Dolbier, Smith, & Steinhardt, 2007; Britt, Adler, & Bartone, 2001; Mednick et al., 2007).

Early hardiness theorists continue to evaluate the validity of this personality construct and its benefits as a protective factor (Maddi et al., 2006). Originally assessed by established scales that measured alienation, locus of control, powerlessness, and the importance of safety, stability, and predictability (Kobasa, et al., 1982), hardiness is now measured by the Personal Views Survey, now in its third, revised edition (Maddi et al., 2006). Conceptually and statistically, hardiness is negatively related to both physiological arousal response to stress (r = -.44) and avoidance and denial coping response to stress (r = -.50). It is positively related to active problem solving (r = .50) and perceived social support from work (r = .35) and family (r = .38) (Maddi et al., 2006).

For example, researchers found that hardiness negatively predicted scores on measures of global stress (β = -.42) and symptoms of physical illness (β = -.34). Participants were 508 male and female employees of two large corporate organizations and represented a variety of demographics including age, minority status, and income level. Researchers also measured employee participants' perceived level of support from their supervisor and cognitive and behavioral coping style. The positive effects of hardiness explained a greater portion of the variance in global stress (r =- .56) and symptoms of illness (r = -40) than either supervisor support (r = -.16, stress; r = -.18, illness) or coping style (r = -.49, stress; r = -.29, illness) (Dolbier et al., 2007).

Hardiness in Military Personnel

Hardiness has been examined in both peacetime and combat veterans. King, King, Foy, Keane, and Fairbank (1999) found that levels of post-war hardiness, a component of resiliency, was significantly and negatively related to PTSD symptomatology in a national survey of male and female Vietnam veterans. The authors

hypothesized a hierarchy of PTSD predictors with war-zone stressors at the top, followed by post-war resiliency factors (including hardiness) and pre-war risk factors (King et al., 1999). While the hierarchy accurately explained PTSD symptomatology in male veterans, the findings amongst female veterans were slightly different- with post-war resiliency being more important than specific war-zone stressors. In explaining this differential effect, the authors suggested that the specific war-zone stressors experienced by female veterans were likely less directly life threatening and perhaps less salient than those experienced by male veterans (King et al., 1999). Even in light of this difference, hardiness was a significant predictor of PTSD outcome in both male and female veterans.

In another study, stressful life events, combat stress, hardiness, and physical and psychiatric symptoms were measured in a sample of Army Reservists deployed to the Persian Gulf (Bartone, 1999). Across conditions of high and low life stress, combat stress, and symptom indices, those with higher levels of hardiness reported fewer health problems and lower symptom severity. Bartone concluded that the effects of hardiness are especially important when combat stress increases, as its differential effects were more pronounced in those reporting higher levels of combat exposure. The hardiness-by-combat stress exposure interaction was a large and significant predictor of symptom severity ($\beta = -.51$).

In a sample of non-combat deployed Army personnel, Adler and Dolan (2006) defined context specific hardiness as, "the degree to which military personnel are committed to, feel challenged by and have some sense of control over their work experiences in the military environment" (p.94). The authors found a significant interaction between military hardiness and deployment related stressors on post-

deployment depression measures. Consistent with previous findings (Bartone, 1999), the interaction was strongest when deployment stressors were greatest. The authors point out that post-deployment depression scores were similar for high and low hardy individuals that experienced low deployment stress, but depression scores for high and low hardy individuals were dissimilar for those who experienced high deployment stress, with hardy individuals having lower depression scores (Adler & Dolan, 2006), again suggesting the moderating role of hardiness in this population. However, the authors note the limits of the relatively small effect size of this interaction, (β = -.081), suggesting that other factors likely contribute to psychological outcomes such as depression.

Purpose of the Study

In light of research regarding the impact of parental trauma exposure on parenting stress and behavior, it is important to investigate protective factors which may moderate the influence of these negative life events. Hardiness has been shown to be a protective factor against a number of stressful experiences, including war trauma (King et al., 1999; Bartone, 1999) however, it has not been investigated as a protective factor in relation to parenting stress for veterans. Furthermore, while there is a wealth of information regarding Vietnam veterans, little is known about the characteristics of modern veterans and their families. The conditions associated with war zones in different times and geographic locations will vary. While the information pertaining to Vietnam veterans is a valuable starting point for understanding the potential needs of modern veterans, the unique make up of the current wars and service members warrants its own investigation. Therefore, the purpose of the current study was to investigate the relationships among

combat-related PTSD symptoms, hardiness, and parenting stress in veterans of the current wars who are parents of young children.

Research Questions

Three primary questions were evaluated in the current study:

1. Do higher levels of combat-related PTSD symptoms, particularly symptoms of numbing, predict levels of parenting stress?
2. Do higher levels of hardiness predict parenting stress?
3. Does hardiness moderate the relationship between combat-related PTSD symptoms and the experience of parenting stress?

CHAPTER II

METHODS

Participants

One hundred seventeen parents of children ages zero to 13 years participated in the study. Participants were 104 fathers or stepfathers, ten mothers, and three unspecified "other" parental figures (e.g., grandparents) of young children and veterans of the current wars in Iraq and Afghanistan who had participated in combat operations within the previous seven years. Demographic characteristics are presented in Table 1. The sample was predominantly Caucasian/White (82.9%) and had a mean age of 33.91 years. Seventy-seven (65.8%) participants had completed up to three years of college, 27 (23.1%) had college degrees, and 13 (11.1%) reported having graduate or professional training. Ninety-one participants (77.8%) were married or living with a partner at the time of the survey. Participants had completed an average 2.05 deployments since the year 2001 and had been home from their most recent deployment for 26.42 months on average, with a range of zero to 96 months. The majority of respondents ($N = 73$, 62.4%) were active duty service members; 35 respondents (29.9%) reported their status as reserve. Given the relative size of the military branches of service, the Marine Corps was overrepresented in this sample with 78 participants (56.1%). Officers ($N = 32$; 28.6 %), compared to enlisted service members ($N = 80$; 71.5%), were also slightly overrepresented in the current sample (Department of Defense, 2010). Parents were asked to select one child when completing the questionnaires. Participants' selected focus child gender was 63.2% male and the average child age was 6.81 years with a range of zero to 13 years.

Table 1

Demographic Characteristics of the Sample

Characteristic (Range)	*M*	*SD*
Parent age (21- 56)	33.91	7.01
Parent education in years (12- 17)	14.17	1.78
No. children in household (1- 7)	2.97	1.15
Focus child age in months (0- 156)	81.72	46.74
No. deployments since 2001 (1- 7)	2.05	1.18
No. active combat events during most recent deployment (0- 130)	15.72	30.78
No. months home since most recent deployment (0- 96)	26.42	19.10
Duration of most recent deployment in months (1- 30)	8.73	4.12
	N	%
Location of most recent deployment		
Iraq	76	65.0%
Afghanistan	12	10.3%
Other/ Unspecified	29	24.8%
Child Sex		
Male	74	63.2
Female	43	36.8
Relationship to child		
Father	97	83.6
Stepfather	6	5.2
Mother	10	8.6
Other	3	2.6
Marital status (current)		
Married or living with partner	91	77.1

Table 1 (continued)

	N	%
Single or living alone	10	8.5
Divorced	10	8.5
Separated	6	5.1
Parent race/ethnicity		
Caucasian	97	82.9
Hispanic	10	8.5
African-American	4	3.4
Asian	2	1.7
Other	4	3.4
	N	%
Service branch		
Air Force	7	5.9
Army	20	16.9
Coast Guard	2	1.7
Marine Corps	78	66.1
Navy	10	8.5
Status		
Active	73	62.4
Reserve/Guard	35	29.9
Retired Active	7	6.0
Retired Reserve/Guard	2	1.7
Military grade (rank)		
E2- E4	11	9.8
E5- E9	69	61.7
WO2- WO4	5	4.5
O2- O5	27	24.1

In light of the available literature reporting effect sizes between β = -.25 (Samper et al., 2004) and β = -.86 (Ruscio et al., 2002) for the relationship between PTSD and parenting variables, a desired medium effect size of $f^2 = .15$ was entered into G-power analysis software (Faul et al., 2007). Based on six predictors (three subscales in each of the two parenting measures), a total sample size of $N = 98$ was needed to achieve a desired power of .80.

Measures

Participants completed a general demographic questionnaire (see Appendix A) including the gender and age of the parent and focus child, income, education level, race/ethnicity, number of children, duration and location of deployment, number of deployments, current military status (i.e., active, reserve, or retired), and branch of military service. Additionally, current and previous marital status was assessed as well as age of child at time of deployment.

Hardiness

Hardiness was assessed using the Dispositional Resilience Scale (DRS-15-R), a 15-item self-report measure developed by Bartone (1995). The measure contains both positively and negatively scored items (Bartone, 1991) reported on a Likert scale from *Not At All True* (0) to *Completely True* (3). The measure includes three subscales to assess challenge, control, and commitment to life events (Britt et al., 2001). Subscales are combined to yield a total hardiness score; both the subscale and total scores were used in the current study. Total scores can range from 0 to 45 with higher scores indicating a more hardy personality type. This measure has been used in samples of deployed peacekeeping Army personnel (Britt et al., 2001) as well as Army personnel deployed to

Gulf War zones (Bartone, 1999). Bartone reports the Cronbach's alpha for the total measure is .83 in the large sample of Army reservists deployed to Gulf War zones.

Bartone (2007) reported the three week test-retest reliability in a sample of 104 undergraduate students in a military academy. The total scale yielded a coefficient of .78, and the commitment, control, and challenge subscales yielded coefficients of .75, .58, and .81, respectively. Due to the relatively low coefficient found for the control subscale, the author discourages interpretation based on individual subscales, in favor of the total score (Bartone, 2007). In the current sample, Cronbach's alpha coefficients were .70 (challenge), .70 (control), .83 (commitment), and .80 (total score). Thus, the subscale scores were used in regression analyses for the current study.

Parenting Stress

The Parenting *Stress Index-Short Form* (PSI-SF: Abidin, 1995) is a 36-item self-report scale used to measure levels of parental distress, dissatisfaction with parental role, and perceptions of child's difficult behavior. Parents rate their level of agreement with statements on each of three subscales, using a five point Likert system from *Totally Agree* (5) to *Totally Disagree* (1). Total scores are calculated by summing the three subscales, Parental Distress, Parent-Child Dysfunctional Interaction, and Difficult Child subscale and can range from 36 to 180. Only the total score was used in the current study ($\alpha = .94$). Higher scores are indicative of increased levels of stress.

Abidin (1995) reported an alpha coefficient of .94 between the PSI-SF and the original full length form. Correlations between the full length domains and the short form scales were .87 and .92 for the child and parental distress scales, respectively. Internal consistency, using a sample of 185 mothers and fathers was reported as .83 for

the total scale (Haskett, Ahern, Ward, & Allaire, 2006). The Total Scale had strong correlations with parents' reports on the Global Severity Index (.56), a measure of emotional health and the Eyberg Child Behavior Inventory (.55), a measure of child conduct problems (Haskett et al., 2006).

Combat- Related PTSD

To examine combat-related symptoms, participants completed the Posttraumatic Stress Disorder Checklist- Military Version (PCL-M). The PCL-M is a 17-item self-report measure of PTSD symptoms. The items were designed using current DSM criteria for posttraumatic stress disorder (Cook et al., 2005) and rated using a five point Likert type scale with possible responses ranging from *Not At All* (1) to *Extremely* (5) (Forbes, Creamer, & Biddle, 2001), with higher scores indicating a greater severity or prevalence of symptoms. Total scores may range from 17 to 85, with a total score of 50 or greater indicating positive PTSD status (Hoge et al., 2004). Each of the items represent one of the three identified symptom clusters outlined in the DSM-IV; cluster B (re-experiencing), cluster C (avoidance/numbing), and cluster D (hyperarousal) (Cook et al., 2005). The PCL-M has been utilized by researchers evaluating PTSD in veterans of the wars in Iraq and Afghanistan (Erbes et al., 2007; Jakupcak et al., 2007) and has recently been reevaluated for validity in this population (Bliese et al., 2008). Weathers, Litz, Herman, Huska, and Keane (1993) reported the test-retest reliability to be .96. Keen et al. (2008) reported internal consistency for the PCL to be .94; alpha coefficients for the subscales of cluster B, C, and D symptoms were .91, .92, and .96, respectively. Both the total score and the three subscales were used separately in the current study. Alpha

coefficients in the study sample for the re-experiencing, avoidance/numbing, and hyperarousal subscales were .91, .86, and .85, respectively, and .94 for the total score.

Procedure

The University of Southern Mississippi's Instituional Review Board Human Subjects Protection Review Committee approved this study (see Appendix D). Participants were recruited through various methods, including e-mail, postings on online support groups and listservs, and snowballing, whereby individuals who completed the measures informed others about the surveys. The primary investigator located contact information (telephone numbers and e-mail addresses) for commanding officers, first sergeants, and other military personnel on individual military unit web pages. The primary investigator made initial contact with 157 individual personnel by phone or e-mail and provided a brief description of the current study to assess each military unit's appropriateness and interest in participation. One hundred twenty commanding officers or other personnel who expressed potential interest in participation received an e-mail from the primary investigator that contained a more thorough description of the study, researcher contact information, and a link to the survey materials. The initial recipient of this e-mail was encouraged to forward the e-mail to other military personnel via individual e-mail communication or through a military unit listserv.

The researcher also posted a brief description of the study, researcher contact information, and link to survey materials on online support groups or public newsletters for veterans and families. A fixed link to the study was available on a webpage devoted to research in this area. Those who had already completed the study were encouraged to

refer other appropriate families to the researcher or to the online survey materials directly.

Surveys were developed through Survey Monkey, a secure online service provider (www.surveymonkey.com). Privacy was ensured so that obtained data was accessible by the researcher with a secure password. The online survey included an informed consent (see Appendix B), a resource page, and the following measures: demographic information form, the DRS-15-R, PSI-SF, and PCL-M. Families with more than one child chose a focus child and completed all measures in reference to that child. Total time to complete the measures was approximately 15 to 30 minutes. A resource list (see Appendix C) was provided at both the beginning and end of the survey. Human subjects approval was maintained throughout the study (see Appendix D).

Research Questions and Hypotheses

1. Do higher levels of combat-related PTSD symptoms, particularly symptoms of numbing, predict levels of reported parenting stress?

    a. Higher reported levels of combat-related PTSD symptoms as measured by the subscale scores on the PCL-M, will be predictive of of total parenting stress on the PSI-SF, with numbing emerging as a significant, unique predictor.

2. Do higher levels of hardiness predict parenting stress?

    a. Higher reported levels of hardiness as measured by the total score on the DRS-15-R will be predictive of total parenting stress on the PSI-SF.

3. Does hardiness moderate the relationship between combat-related PTSD symptoms and parenting stress?

a. The effect of combat-related PTSD symptoms on parenting stress will vary as a function of veterans' level of hardiness.

CHAPTER III

RESULTS

Means, standard deviations, and sample sizes for each measure are presented in Table 2. For this sample, the average hardiness score, as measured by the DRS-15-R total score, was consistent with previous samples of military veterans (Bartone et al., 2006) and was just below the 50th percentile. Although 11 (9.3%) participants' total scores on the PCL-M exceeded the clinical cutoff indicative of PTSD, the mean PCL-M total score for this sample was consistent with previous veteran samples not meeting diagnostic criteria for PTSD (Weathers et al., 1993). The percentage of participants whose score exceeded the clinical cutoff on the PCL-M was also consistent with recent estimates of PTSD rates among modern veterans (Hoge et al., 2004). Overall, participants reported a relatively low level of parental stress, as evidenced by the mean score on the PSI-SF.

Table 2

Means, Standard Deviations, and Sample Sizes for Study Measures

	M	*SD*	*N*
DRS-15-R (Hardiness)	29.92	6.92	116
PCL-M (PTSD)	30.76	13.34	108
PSI-SF (Parenting Stress)	61.91	19.76	104

Note. DRS-15-R = Dispositional Resilience Scale- Revised; PCL-M = Posttraumatic Stress Disorder Checklist- Military Version; PSI-SF = Parenting Stress Index- Short Form.

To determine whether the assumptions of regression were met in the study sample, a series of visual and statistical analyses were performed. Regressions using squared predictor values and matrix scatterplots were examined to determine if the linearity assumption was met; neither indicated a violation of this assumption. To

determine whether the homoscedasticity assumption was met, unstandardized predicted and residual values were plotted for the dependent measure. Visual inspection of the graph did not suggest heteroscedasticity. All collinearity statistics were within the acceptable range. Thus, it does not appear that the assumptions of regression were violated in the current sample.

A series of bivariate correlations were computed between demographic variables (i.e., number of deployments, parent age, education, status, current rank, family income, number of children, child gender, and number of months home since most recent deployment) and the parenting stress criterion. Parenting a female (focus) child and having a higher annual income were associated with lower levels of reported parenting stress. As family income (r = -.26) and child gender (r = -.23) were the only demographic variables significantly correlated with the criterion, they were entered in the first step of all subsequent regression analyses.

A series of bivariate correlations were calculated to determine the relationships among the study variables (see Table 3). Hardiness, as measured by the DRS-15-R was negatively correlated with all PCL-M symptom subscales and parenting stress as measured by the PSI-SF. Each of the PCL-M subscales were positively correlated with parenting stress.

Table 3

Correlation Coefficients for Study Measures

Variable	1	2	3	4	5	6
1. DRS-15-R	-	-.32**	-.44**	-.31**	-.40**	-.40**
2. PCL-M - Reexperiencing		-	.68**	.74**	.89**	.25*
3. PCL-M - Numbing			-	.71**	.90**	.57**
4. PCL-M - Hyperarousal				-	.91**	.42**
5. PCL-M total score					-	.47**
6. PSI –SF						-

Note. DRS-15-R = Dispositional Resilience Scale; PCL-M = Posttraumatic Stress Disorder Checklist- Military Version; PSI-SF = Parenting Stress Index- Short Form.

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

Hypothesis 1

To test the first hypothesis, that combat-related PTSD symptomatology, particularly symptoms of numbing, is predictive of parenting stress, scores from each of the three PCL-M subscales (re-experiencing, numbing/avoidance, and hyperarousal), were entered as individual predictors and the total parenting stress score was measured as the criterion in a hierarchical multiple regression. Child gender and family income were entered in the first step, and each of the three PCL-M subscales (re-experiencing, avoidance/numbing, and hyperarousal) were entered in second step. The total model explained 39.4% of the variance in the parenting stress criterion ($R^2 = .394$, $F(5, 99) = 12.226$, $p < .001$, with both re-experiencing ($\beta = -.330$, $p = .013$) and numbing ($\beta = .613$, $p < .001$) emerging as significant, unique predictors of parenting stress. See Table 4.

Table 4

Summary of Hierarchical Multiple Regression for PTSD Symptom Clusters Predicting Parenting Stress

Variable	β	R^2	ΔR^2
Step 1		.103**	
Income	-.243*		
Child Gender	-.192*		
Step 2		.394**	.291**
PCL-M Reexperiencing	-.330*		
PCL-M Numbing	.613**		
PCL-M Hyperarousal	.218		

Note. PCL-M = Posttraumatic Stress Disorder Checklist- Military Version.

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

Hypothesis 2

As the DRS-15-R subscales (commitment, control, and challenge) all demonstrated adequate reliability (i.e., $\alpha \geq .70$), subscale scores were regressed on total parenting stress score to test the second hypothesis that hardiness negatively predicts parenting stress. Child gender and family income were entered on the first step, and each of the three hardiness subscales (commitment, control, and challenge) were entered on the second step. The total model accounted for 32.1% of the variance in parenting stress ($R^2 = .321$, $F(5, 99) = 8.872$, $p < .001$), with commitment emerging as a significant, unique predictor ($\beta = -.552$, $p < .001$). See Table 5.

Table 5

Summary of Hierarchical Multiple Regression for Hardiness Subscale Scores Predicting Parenting Stress

Variable	β	R^2	ΔR^2
Step 1		.103**	
Income	-.243*		
Child Gender	-.192*		
Step 2		.321**	.218**
DRS-15-R	-.552**		
Commitment			
DRS-15-R Control	.150		
DRS-15-R Challenge	-.130		

Note. DRS-15-R = Dispositional Resilience Scale.

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

Hypothesis 3

Hierarchical multiple regression was used to explore the hypothesis that hardiness, as measured by the DRS-15-R total score, moderated the relationship between PTSD symptomatology, as measured by the PCL-M total score, and parenting stress, as measured by the PSI-SF total score, when controlling for child gender and family income. Scores on the PCL-M and DRS-15-R were centered based on recommendations by Frazier, Tix, and Barron (2004) before the product terms of the PCL-M (predictor) and DRS-15-R (moderator) scores were calculated. A moderated multiple regression was performed with child gender and family income entered in the first step, centered PCL-M total score and centered DRS-15-R total score entered in the second step, and the interaction of PCL-M and DRS-15-R centered scores entered in the third step. Note that a significant R^2 change at step three is indicative of a significant moderation effect (Frazier et al., 2004). Although the total model accounted for 33.4% of the variance in

the parenting stress criterion, the third step interaction was not significant ($\Delta R^2 = .009$, $p = .274$; $\beta = -.108$, $p = .274$), indicating that the effects of PTSD symptomatology on parenting stress are consistent across levels of hardiness.

Table 6

Summary of Moderated Multiple Regression for PTSD and Hardiness Predicting Parenting Stress

Variable	β	R^2	ΔR^2
Step 1		.103**	
Income	-.243*		
Child Gender	-.192*		
Step 2 (Main Effects)		.325**	.222*
DRS-15-R Total	-.279		
PCL-M Total	.331		
	B	R^2	ΔR^2
Step 3 (Interaction)		$.334^{ns}$	.009
DRS-15-R X PCL-M	-.019[a]		

Note. DRS-15-R = Dispositional Resilience Scale; PCL-M = Posttraumatic Stress Disorder Checklist- Military Version. Beta-weights reported for control variables and main effects.

[a]Unstandardized regression coefficient reported for the interaction

*$p < .05$ **$p < .01$ *ns* = not significant.

CHAPTER IV

DISCUSSION

The purpose of the current study was to examine the relationships among personality hardiness, PTSD symptomatology, and reported levels of parental distress in a sample of military veterans of the wars in Iraq and Afghanistan. It was hypothesized that PTSD symptomatology would predict parenting stress and hardiness would negatively predict parenting stress. Further, it was hypothesized that hardiness would moderate the relationship between PTSD symptomatology and parenting stress in this sample of modern veterans. Results indicated that PTSD symptomatology, particularly symptoms of numbing, predicted parenting stress in modern veterans. More than one third of the variance in the parenting stress criterion was explained by PTSD symptomatology. Personality hardiness was a negative predictor of parenting stress in modern veterans, explaining nearly one-third of the criterion variance. The third hypothesis, that hardiness would moderate the effects of PTSD symptomatology on parenting stress was not supported.

The finding that PTSD symptomatology predicted parenting distress is consistent with previous research in both civilian and military samples (e.g., Lauterbach et al., 2007; Ruscio et al., 2002). As predicted, numbing emerged as a unique predictor of parenting stress, with those reporting higher levels of numbing also reporting higher levels of parenting stress.

Although only a minority of participants exceeded the clinical cutoff for PTSD on the PCL-M, this study is consistent with others, demonstrating a significant relationship between sub-threshold PTSD and parenting variables (e.g., Gold et al., 2007; Ruscio et

al., 2002). Even mild to moderate levels of PTSD symptomatology seem to have an impact on level of parental stress. Further, symptoms of numbing in the absence of diagnosable PTSD were uniquely predictive of parental stress. Previous research has found that children of Vietnam veterans meeting diagnostic criteria for PTSD had significantly more behavioral problems than children of veterans without PTSD (Jordan et al., 1992). Given the greater likelihood that modern veteran fathers are more involved in direct child care than their Vietnam veteran counterparts, it is especially important to understand the negative impact that PTSD symptomatology has on the father-child relationship and subsequent child development.

In light of the finding that each of the three PCL-M subscales had significant, positive bivariate relationships with PSI-SF total score, it is unclear why re-experiencing emerged as a significant, but negative, predictor of parenting stress in the regression model. Previous researchers have found only non-significant relationships between the reexperiencing cluster and parenting or family adjustment variables, and those relationships were often in the opposite direction of that found in the current study (Samper et al., 2004; Taft, Schumm, Panuzio, & Proctor, 2008). Perhaps the reexperiencing reported by this sample was so intrusive that it interfered with veterans' contact with their children. Alternatively, reexperiencing may be the most ego-dystonic of the clusters, overshadowing all other forms of stress in the veteran's life. If veterans in the current sample were particularly disturbed by symptoms of reexperiencing, they may have had either very little contact (and therefore stress) with their children, or their parental distress may have paled in comparison to their PTSD symptomatology, thus resulting in lower reporting on the PSI-SF.

Although child behavior was not measured directly in the current study, one may infer that the emotional withdrawal associated with symptoms of numbing may lead children to externalize as they attempt to increase contact with the detached parent; this externalizing behavior and increased contact may be particularly stressful for the otherwise avoidant parent. Alternatively, numbing may differentially interfere with the veteran's ability to experience positive or negative emotionality. If positive emotionality is impacted to a greater extent than negative, the veteran-parent may recognize the challenges of parenting more quickly than emotionally healthy controls. Future research should aim to understand the mechanisms through which numbing impacts parental stress.

Sheppard et al. (2010) presented a framework for understanding the organizational challenges faced by military families both during and after a deployment. The authors discussed the inherent stressors associated with changing family routines and level of structure during and after a deployment. Utilizing this framework, parents in the current study who experienced PTSD symptomatology may have also reported higher parental stress as a function of more diffuse, but compounded adjustment difficulty, rather than specific child behavioral reactions to the parent. Inability to participate in or maintain routines may be another mechanism through which PTSD symptomatology affected parenting stress in the current sample (Sheppard et al., 2010).

In relating the constructs of hardiness to parenting, particularly among parents returning from a military deployment, several links are intuitive. First, consider the challenge component. Hardy individuals view changes, or challenges, in a positive light. As the veteran-parent returns from a yearlong deployment, he finds his child at a new

developmental stage. While the low hardy parent is overwhelmed by the sudden role and task changes, the hardy parent has a more positive appraisal of the new demands of parenting. The hardy veteran's commitment may work to buffer the stress that results as families renegotiate their structure and division of responsibilities to accommodate the returning parent. Similarly, a sense of control may increase the veteran's confidence and efficacy as he resumes the parental tasks of guidance and discipline.

The lack of support for the moderating effects of hardiness on the relationship between PTSD symptomatology and parenting stress is somewhat surprising. Previous research has found the benefits of hardiness to increase with the level of combat related stress when predicting symptoms of physical and psychological health (Bartone, 1999). Kobasa et al. (1982) also reported that hardiness was most influential on health outcomes when general life stress was high. Adler and Dolan (2006) found moderating effects of hardiness when predicting depression, but not when predicting physical health. The authors suggest that hardiness may interact with variables differently when predicting physical versus psychological outcomes. However, as parenting stress is more accurately categorized as a psychological variable, such an interpretation does not effectively explain the current findings.

The failure to find a moderating effect of hardiness may be due to the relatively low level of PTSD symptomatology reported by study participants. Perhaps there is a critical level of combat-related stress, or PTSD symptomatology, that must be reached for differential effects of hardiness to be observed. Conversely, the current study may have elucidated a real difference in the way hardiness impacts parenting stress as compared to other dependent measure, such as depression or physical health. This would imply that

personality hardiness has various mechanisms through which it affects various outcomes. Further researchers may seek to identify such mechanisms.

Limitations

Several limitations of the current study warrant mention. While the current study extends the existing parenting literature with a sample of predominantly fathers, the current findings cannot necessarily be generalized to mothers or female veterans. Although Deater-Deckard and Scarr (1996) reported similar scores on the PSI-SF for mothers and fathers, due to the relatively low number of female participants in this study, it is unclear whether women's combat experience and subsequent PTSD symptomatology impacts their level of parental stress in the same manner as their male counterparts. Further, parents in this study reported relatively low levels of parenting stress. While this is an encouraging finding, underreporting may have affected results. Whether the reported level of stress is accurate or underreported, results should only be generalized to parents reporting mild to moderate levels of parenting stress.

Another limitation of the current study is that additional variables, such as co-morbid psychiatric disorders, were not assessed. However, previous studies have demonstrated that PTSD symptomatology affects interpersonal variables over and above the effects of depression and substance abuse (Erbes et al., 2007; Samper et al., 2004). Thus, it is reasonable to infer that a notable portion of the variance in parenting stress is explained by veterans' PTSD symptomatology.

While participants were recruited from diverse geographic regions, this approach resulted in much response variability on deployment-specific demographic questions. For example, participants' number of months home ranged from zero to 96 months.

Though it was not significantly related to the parenting stress criterion, one would expect differences in adjustment level between veterans who have been home for a few weeks and those home for six years. Further, because every precaution was taken to ensure participant and military unit anonymity, the researcher cannot speculate about third variables that may have influenced one unit's decision to participate over another or how many respondents belonged to the same military unit.

Suggestions for Future Research

The finding that the benefits of hardiness extend to parenting variables is a significant strength of the current study. Consistent with the author's prediction, hardiness negatively predicted parenting stress. This finding suggests that even at relatively low levels of parenting stress, an individual's sense of commitment, control, and challenge influences their experience of the parent-child relationship. The large effect of hardiness in the current study is in contrast to the modest effects reported previously (Barton, 1999). The current finding is also in partial contrast to Adler and Dolan's (2006) results, which failed to find a significant main effect of hardiness on post-deployment depression measures. While the current study adds interesting contrasts to the existing literature, more research is needed to compare the current results with other parent populations.

The current study added to the existing knowledge base of combat-related PTSD and parenting stress but it did not directly compare combat-related PTSD to PTSD of other origins, such as sexual assault or natural disaster. Future research may explore potential differences in the effects of PTSD on parenting variables between civilian and military populations. Perhaps interpersonal traumas (e.g., sexual assault) are more likely

to interfere with subsequent interpersonal relationships than less interpersonal traumas, such as combat exposure. Conversely, combat exposure may be classified as an interpersonal trauma, and its subsequent effect on interpersonal relations may be similarly affected. Alternatively, there may be no differences across populations or various causal factors of PTSD.

Clinical Implications

Clinicians may focus on improving veterans' ability to initiate and maintain interpersonal bonds, particularly with young children. Psychoeducation at the family level could facilitate co-parents' understanding of post-combat adjustment, while family therapy may target problematic interactions between the parent and child. Increasing a child's understanding of the parent's distress may decrease difficult child behaviors, such as questioning the veteran about his combat experience, while increasing the veteran's ability to approach the trauma in an adaptive way.

The purpose of the current study was to examine the relationships among level of personality hardiness, the experience of PTSD symptomatology, and reported levels of parental distress in a sample of military veterans of the current wars. Although researchers have examined relationships between hardiness and PTSD and PTSD and parenting stress, this is the first study to evaluate all of these variables in a sample of modern veterans with young children. The current study extends the findings of previous research by utilizing a more recent sample of combat veterans whose children are currently under the age of 13 years. Findings revealed significant strengths in this population of combat veterans. Overall, PTSD symptomatology was low. That is, despite exposure to traumatic imagery, the majority of veterans in this study did not

report on-going psychological distress related to combat experience. Futures researchers and clinicians alike may wish to consider ways to increase hardiness in pre-deployed personnel.

Veterans in this study also reported average levels of personality hardiness, indicating their overall resilience in light of life stress. This valuable personality construct seemed to have salubrious effects, as it was associated with lower levels of PTSD symptomatology and parenting stress in our sample. Overall, our findings support a rather positive characterization of modern veterans' adjustment to parenting at post-combat.

APPENDIX A

GENERAL INFORMATION FORM

The person completing this form is:

_____ Mother _____ Father _____ Other: (please specify)_____
_____

Your Age: _____

Race/Ethnicity: _____ White/Caucasian _____ Black/African American
_____ Hispanic _____ Native American (Indian)
_____ Asian _____ Other (specify) _____

Number of years of education: (please circle last grade completed)

6	7	8	9	10	11	12	13	14	15	16	17+
						Graduated High School				Graduated College	Graduate/ Professional School

Current military status: ____Active ____Reserve/Guard ____Retired

Branch of service: ___Army/Guard ___Air Force ___Navy ___Marine Corps

Rank: E___ O___

Current Marital Status:

_____ Never married/ living alone _____ Divorced/ separated
_____ Never married/ living with someone _____ Widowed
_____ Married

If divorced, are you the child(ren)'s primary guardian? ____ Yes _____ No

Marital Status at time of deployment:

_____ Never married/ living alone _____ Divorced/ separated
_____ Never married/ living with someone _____ Widowed
_____ Married

Please rate the overall quality of your relationship with your spouse or significant other:

1	2	3	4	5
Poor	Fair	Good	Excellent	Not currently in a relationship

Current Employment: (please describe job title & place of work)

Mother: _____

Father: _____

Annual Income:_____ less than $10,000 _____ $10-$20,000 _____ $20 - $30,000
_____ $30-$40,000 _____ $50,000+

Number of children who reside with you: _____

Please select one child under the age of 12 years who resides with you. This will be the "focus child" for this study. Please refer to this child when completing the rest of the forms.

Child age and birth date: _____

Child gender:_____

Child age at time of most recent deployment:_____

Duration of most recent deployment:_____

Location of most recent deployment:_____

Date you returned from most recent deployment:_____

Number of months you have been home since returning from most recent deployment:_____

Total number of deployments since 2001:_____

Please indicate the approximate number of times you engaged in active combat during your most recent deployment. Examples of active combat include, but are not limited to: being attacked or ambushed; receiving artillery, rocket, or small arms fire; shooting at the enemy; seeing or handling dead or injured bodies; or engaging in hand to hand combat:

_____

APPENDIX B

CONSENT FORM

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT titled:
Role of Hardiness in Moderating Parenting Stress in Iraq and Afghanistan War Veterans

Purpose: The purpose of this study is to examine current veterans' experiences related to their roles as parents and combat veterans.

Description of Study: Participating individuals will be asked to complete online questionnaires related to their military combat experience and parenting. The survey will take an estimated 30 minutes to complete. Participation in this project is completely voluntary.

Benefits to the participant: Participation in this study may lead to increased insight into the protective factors that buffer against the negative effects of combat related traumas in veterans of the current wars.

Risks: Foreseeable risks associated with the proposed project may include an increase in stress, but it is unlikely that this will be more than would be expected in daily interactions. While participants are encouraged to complete the survey, there is no penalty for withdrawing from this project at any time. A resource list will be made available to all participants at the beginning and end of the survey.

Confidentiality: All efforts will be made to protect participant's privacy and to maintain the confidentiality of the data acquired through this project. Questionnaires will be completed through a secure, protected website. Individual participants will not be identified by name. The computerized data will be maintained numerically with no identifying information. Researchers will have access to all data obtained during this study.

Subject's Assurance: Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted), the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and subjects may withdraw from this study at any time

without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to Dr. Bonnie C. Nicholson (601-266-4598). This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS 39406, (601) 266-6820.

Consent: Consent to participate is indicated by the completion of the measures.

APPENDIX C

RESOURCE LIST

If you are experiencing distress and would like assistance, please contact one of the resources below.

Defense Centers of Excellence for Psychological Health Outreach Call Center *The DCoE Outreach Center is open 24 hours a day, seven days a week to answer questions related to psychological health. Services are available by telephone or email.*	1-866-966-1020 resources@dcoeoutreach.org http://www.dcoe.health.mil/Default.aspx
Military OneSource *Military OneSource is provided by DoD at no cost to active duty, Guard, and Reserve (regardless of activation status) and their families. Counseling services are provided face-to-face, online, or by telephone. The service is private and confidential; however, your identity must be verified for their internal records only.*	1-800-342-9647 http://www.militaryonesource.com/
National Suicide Prevention Lifeline *The National Suicide Prevention Lifeline is a nationwide network of crisis centers. Calls are routed to the nearest available crisis center. The hotline is staffed by trained counselors and is available 24 hours a day, seven days a week. The service is free and confidential.*	1-800-273-TALK (8255) http://suicidepreventionlifeline.org/
Deployment Health Clinic *The core mission of the Deployment Health Clinic is to improve deployment-related health by providing caring assistance and medical advocacy for military personnel and families with deployment-related health concerns.*	1-800-796-9699 http://www.pdhealth.mil/
Vet Centers *Vet Centers provide readjustment counseling*	1-800-905-4675 (Eastern Time Zone)

and outreach services to men, women, and families of those who served in the military. The Vet Centers are staffed by small multi-disciplinary teams of dedicated providers, many of which are combat veterans themselves.	1-866-496-8838 (Pacific Time Zone). http://www.vetcenter.va.gov/

APPENDIX D

HUMAN SUBJECTS APPROVAL

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147
Hattiesburg, MS 39406-0001
Tel: 601.266.6820
Fax: 601.266.5509
www.usm.edu/irb

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **29111703**
PROJECT TITLE: **Role of Hardiness in Moderating Parenting Stress in Iraq and Afghanistan War Veterans**
PROPOSED PROJECT DATES: **12/01/09 to 01/31/11**
PROJECT TYPE: **Thesis**
PRINCIPAL INVESTIGATORS: **Victoria J. Tomassetti**
COLLEGE/DIVISION: **College of Education & Psychology**
DEPARTMENT: **Psychology**
FUNDING AGENCY: **N/A**
HSPRC COMMITTEE ACTION: **Expedited Review Approval**
PERIOD OF APPROVAL: **11/30/09 to 11/29/10**

Lawrence A. Hosman
Lawrence A. Hosman, Ph.D.
HSPRC Chair

12-4-09
Date

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