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Analyzing The Effects of Post-Traumatic Stress Disorder on Marital Satisfaction Among The Veteran Latino Population of South Texas

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ANALYZING THE EFFECTS OF POST-TRAUMATIC STRESS DISORDER ON MARITAL
SATISFACTION AMONG THE VETERAN LATINO POPULATION OF SOUTH TEXAS

A Thesis

by

IRIS J. SEGUNDO

Submitted to the Graduate School of the
University of Texas-Pan American
In partial fulfillment of the requirements for the degree of

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August 2013

Major Subject: Clinical Psychology

ANALYZING THE EFFECTS OF POST-TRAUMATIC STRESS DISORDER ON MARITAL
SATISFACTION AMONG THE VETERAN LATINO POPULATION OF SOUTH TEXAS

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August 2013

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ABSTRACT

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The current study examined the relation between combat exposure and Post-Traumatic Stress Disorder (PTSD), PTSD and marital satisfaction and the influence of religion/spirituality as a moderator. Study consisted of 31 participants; male veterans ($n=19$) and female spouses ($n=12$), of which 11 were couples ($n=22$). Participants were recruited from the University of Texas Pan-American (UTPA), local veteran organization and networking. The sample completed self-report measures for combat exposure, PTSD, marital satisfaction, and religiosity/spirituality. When using a correlation analyses to examine the relation between combat exposure and PTSD and PTSD and marital satisfaction, results showed a negative relation for both; thus, supporting the first hypothesis. Moreover, when using a regression analyses to examine religiosity/spirituality as a moderator, results did not support the second hypothesis.

DEDICATION

The completion of Master of Arts degree in Clinical Psychology would have not been possible without the love and support of my loving parents and my dear friends. I also would like to dedicate this accomplishment to all the U.S. Veterans and their families from past and present, whose love, desire, and dedication to serve our country has gone above and beyond any fears and obstacles and have taken it upon themselves to fight for our very own freedom. To these selfless men and women who are with us today and to the ones who have left us, thank you, for it is because of you that we can actually say we are free.

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CHAPTER 1

INTRODUCTION

Combat operations in Iraq and Afghanistan have greatly exposed U.S. service members to higher levels of combat exposure (Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004) in the last decade. The latest Fiscal Year report done by the U.S Department of Defense reported that a total of 186,000 service members have been deployed to Iraq and Afghanistan (Department of Defense, 2009). This same report, which is a population representation in the military services, also reported that the U.S. Military is composed of a total of 1.4 million active duty troops and 850,000 reservists of which about 263,250 (i.e., 11.7%) are Hispanic (Department of Defense, 2009). The recent combat operations in Iraq and Afghanistan have been the first ground warfare the United States has undertaken since the Vietnam War and are raising awareness about the mental health consequences of combat exposure for the service members who have deployed to these two war zones (Hoge et al., 2008). Due to the high rates of deployments and the high rates of Post-Traumatic Stress Disorder (PTSD) being reported by the Veterans Affairs, it is important to consider the effects of PTSD on the service members. According to Veterans Benefits Administration (2006), the Department of Veteran Affairs provides disability compensation or mental health treatments to over 380,000 veterans with PTSD (Fontana, Resenheck & Gray, 2007). PTSD is an anxiety disorder associated with

exposure to life-threatening events such as combat (Sayer, Clothier, Spont & Nelson, 2007) in where the sufferer experiences intense distress associated with memories related to the trauma hyper-vigilance, sleep disturbance, withdrawal and numbing along with other manifestations of physiological arousal (American Psychiatric Association, 2000). Vietnam veterans were the first ones to be diagnosed with PTSD under the DSM-III criteria. Since the introduction of PTSD to the DSM, there has been about 30% of Vietnam, 60% former prisoner of war (Murdoch, Hodges, Hunt, Cowper, Kressin & O'Brien, 2003), 10% of Gulf War, 6% to 11% of the Afghanistan war, and about 12% to 20% of the Iraq war veterans given the diagnosis of PTSD (Department of Veteran Affairs, 2009).

The Hispanic population is the fastest growing ethnic minority group, accounting for 56% of the Nation's growth in the past decade: 31.8 million are Mexican-Americans, which accounts for 10% of the entire U.S. population (Pew Hispanic Center, 2011). Moreover, the Pew Hispanic Center also reported the same year that Mexican-Americans comprise 63% of the U.S. Hispanic population (Pew Hispanic Center, 2011). Based on these statistics, it is safe to assume that the number of Hispanics of Mexican-American decent is not only expected to increase in the U.S. but in the U.S. military as well. Taking this into consideration, previous studies have shown that Hispanics may be more vulnerable to PTSD (Pole, Best, Metzler & Marmar, 2005) it is important to direct focus on how PTSD is impacting this population. For example, researchers have found that ethnocultural differences in the form of peritraumatic responses were one of the main reasons why Hispanics officers had higher levels of PTSD symptoms compared to Caucasian and Black officers (Pole, Best, Weiss, Metzler, Liberman, Fagan, & Marmar, 2001). Furthermore, it has been suggested in previous literature that racial minorities in American society experience heightened levels of stress (Rothman, Gant, & Hnat, 1985). Cultural

characteristics are important to take into consideration because researchers have found that failing to do so can cause significant detriment in the effectiveness of the treatment (Rothman, Gant, & Hnat, 1985). With the continual deployment of U.S. servicemen to both combat zones and Hispanics being more vulnerable to higher rates of PTSD, the purpose of this study will be focused on the Hispanic population of Mexican-American descent to examine the relations between PTSD and marital satisfaction.

In line with this focus, previous research has reported a strong association between PTSD and intimate relationship problems among the veteran population, it is important to examine the factors that predict PTSD and the effect PTSD has on marital relations. Studies have also shown that veterans diagnosed with PTSD due to military-related trauma report higher levels of relationship problems and family adjustment than veterans with no PTSD diagnosis (Monson, Taft, & Fredman, 2009). The current study will utilize the stress adaptation theory to explore how high levels of combat exposure result in high levels of PTSD, thus, resulting in lower levels of marital satisfaction. Moreover, the Fowler's Model of Faith Development Stages will be used to examine how religiosity moderates the relations between combat exposure and PTSD and the relation between PTSD and marital satisfaction.

CHAPTER II

LITERATURE REVIEW

Combat Exposure Leading to PTSD

Previous research conducted after other military conflict has shown that exposure to combat result in considerable risk of mental health problems such as PTSD (Hoge et al., 2004). For example, with a sample of 151 veterans the extent and severity of exposure to active combat atrocities exposure was significantly related to overall symptom severity of PTSD (Renshaw, Rodrigues, & Jones, 2009). Further, researchers have concluded that exposure to combat resulted in considerable risk of PTSD for Marines, Army, and National Guard soldiers who deployed to Iraq and Afghanistan since they are exposed to higher levels of combat (Hoge et al., 2004; Renshaw et al., 2009). Based on these findings, the level of combat exposure must be considered to examine the level of effect it has on PTSD and in turn in marital satisfaction.

Military-Related PTSD and Marital Satisfaction

Recent data highlight the difficulties (e.g., lower levels of self-disclosure and emotional expressiveness) that service members face when reintegrating to family life after long separations and in re-establishing bonds with spouse (Monson et al., 2009). Specifically, combat veterans with PTSD were more likely to report higher levels of impaired intimacy and relationship dissatisfaction when compared to veterans without PTSD (Monson et al., 2009). Given the large number of armed services member currently returning from Iraq and

Afghanistan who experienced PTSD (Hoge et al., 2004) and the fact that approximately one-third of PTSD patients fail to recover even after many years (Kessler, Bromet, Hughes, & Nelson, 1995), it is important to pay attention to how PTSD impacts individual's relationships such as marital relationships. High rates of marital instability evident among veterans with PTSD may be a basis or predictor to lower levels of marital satisfaction. Based on these findings, this study will utilize the Stress Adaptation Theory to examine if higher levels of PTSD are related to lower levels of marital satisfaction.

The stress adaptation theory examines the process of change through exploring how individuals and groups adapt and alter in the face of stressful life events. Moreover, the stress adaptation model posits that a couple's ability or inability to adapt to external stressors may impact the stability and the well-being of marital satisfaction (Graham & Conoley, 2006). Additionally, the Karney and Bradbury's Vulnerability Stress-Adaptation Model (1995) focuses on the interaction that the spouses' have when enduring stressful life events and vulnerabilities, and in the adaptive processes the couples have (Graham & Conoley, 2006). Applied to the current study, this theory suggests that by the veteran and the spouse adapting and utilizing available resources for dealing with the stressors a couple might undergo due to the PTSD, the couples can reach a better marital quality and alleviating the impact of the stressors which PTSD might have on marital satisfaction.

Purpose of the Study and Theoretical Background

For the purpose of this study, marital satisfaction is operationally defined as a mental state that reflects the perceived benefits of marriage to a particular person. As previously mentioned, this study will examine how higher levels of PTSD lead to lower levels of marital satisfaction. Previous research emphasizes how PTSD affects male veterans in their intimate

relationships. However, there is a lack of research focusing on how wives of veterans suffering with PTSD are affected; this is important to take into perspective because literature has shown that wives have been negatively affected in the marriage (Dekel, Goldblatt, Keidar, Solomon, & Polliack, 2005). Consistent with the literature, researchers have also examined how the wives of war veterans with PTSD are affected negatively in the marriage and are put at risk of experiencing marital distress; however, little is known of exactly what are the factors that lead to elevated distress in the spouses (Renshaw et al., 2009). To address this point, Dekel examined the martial perceptions of how nine wives living with PTSD victims who reported decreases in marital satisfaction and higher levels of marital distress experienced by the wives (Dekel et al., 2005). This provides the opportunity to expand on the previous research done on Hispanics and focus this study on the Mexican-American veterans of OEF and OIF and their spouse and examine how the association of PTSD and marital satisfaction impacts this population.

In order to help account for cultural values, religiosity will serve as a cultural variable. Religiosity is expected to moderate between combat exposure and PTSD and as well as PTSD and marital satisfaction. Religiosity/spirituality is perceived as a major source of meaning and comfort for those who undergo severe or intense negative life events (Chen & Koenig, 2006). Findings from a series of 11 studies demonstrated a significant association between religiosity/spirituality and PTSD. According to Chen and Koenig, “exposure to trauma may have an effect on people’s religious beliefs and involvement, yet such beliefs and involvement may also function as resources for those struggling to cope with trauma” (Chen & Koenig, 2006, 380). Based on these findings, this study through the use of Fowler’s Model Faith Development Stages will examine how religiosity serves as a buffer and moderates the relationship between combat exposure and PTSD and between PTSD and marital satisfaction.

The studies mentioned above focused on investigating the association/relationship of combat exposure and PTSD. Also, some studies investigate the association between PTSD and marital satisfaction. However, studies like the one Beckman et al. conducted focuses of Vietnam veterans, thus, limiting the results to only represent the Vietnam veteran, and not the spouse. This brings to the point that there are specific characteristics that differ from OEF, OIF and Vietnam veterans, such as the “Vietnam veterans had to face a negative homecoming reception, including a sense of lack of support from both society and family” (as cited in, Kathleen, Owens & Cottingham, 2010, p. 25) as compared to the OEF and OIF veterans receive more societal and family support when returning from combat (Kathleen, Owens & Cottingham, 2010). Similarly, the study conducted by Renshaw et al. focused only on the NG veterans, thus, also limiting the sample to only represent the NG reserve population from that specific location of the U.S not taking into account cultural differences and active duty members, who deploy more constantly. It is important to take into consideration the cultural differences among the veterans since culture plays an important role in everyone’s life. Moreover, adding religion as a moderator will not be used in terms as a predictor as it was used in Yung and Koenig study. In this study, religion/spirituality will be used as a moderator between combat exposure and PTSD as well as between PTSD and marital satisfaction. This will help focus on how religion/spirituality play a role as a buffer between these variables and as a protective role against stressors that combat exposure, PTSD and marital satisfaction may have on the veteran and spouse. Taking these previous studies into consideration and how combat exposure is directly linked to PTSD and not to marital satisfaction, it serves as a basis to conduct this study to investigate the relations among these variables.

Fowler's Model of Faith Development Stages will be used for the moderator model focused on how religiosity moderates the relation between PTSD and marital satisfaction.

Fowler's Model of Faith and Development (1981) is a growth oriented approach to spiritual and religious development that focuses on adaptive qualities. This theory is composed of various patterns by which humans make sense of and commit to transcendent values and reality as individual progresses through the life-span (Parker, 2009). By applying some stages of this theory to the moderator model such as stage four that focuses on one's form of world coherence the veteran and spouse will be able to make sense of their surrounding such as the effects PTSD might have on the marital satisfaction, thus looking at it in a different and more reflective manner. Moreover, applying the stage of social awareness will help bring the couple awareness of what it is important for them to either include or exclude from their life/marriage in order to create a more stable environment (Parker, 2009). The purpose of this study is to determine the relation between PTSD and marital satisfaction, the influence of combat exposure on PTSD, and religiosity/spirituality as a moderator between combat exposure and PTSD as well as PTSD and marital satisfaction. Including religion as a moderator variable will bring a different perspective of awareness of how these variables might have an impact in the Mexican-American culture.

Based on previous research, I hypothesize that the higher levels of combat exposure will be associated with higher levels of PTSD, and in turn, to lower levels of marital satisfaction.

Moreover, a second hypothesis is based on the moderator variable of religion; it is hypothesized that the more religious the veteran/spouse the less impact combat exposure will have in PTSD, and in turn, the less impact PTSD will have on marital satisfaction.

CHAPTER III

METHODOLOGY

Participants

The study consisted of 31 participants; male veterans ($n=19$) and female spouses ($n=12$) all over the age of 18. In the study, there were 11 couples ($n=22$) and 9 participants whose respective spouses did not participate; males ($n=8$) and female ($n=1$); 9 participants were students at UTPA and were offered extra credit for their participation. The remaining participants were recruited from UTPA, veteran organization, and networking; these participants were offered the opportunity to enter a raffle to win a gift card. Participants reported a range in marriage between 1 year to 17 years and to have between 0 to 3 children. Moreover, this study focused on veterans who have been exposed to combat in OIF and OEF from 2001 to 2011. Male participants reported serving in the following branches of service: U.S. Marines, U.S. Army, U.S. Navy, and U.S. Air Force, both active duty and reserve and that they deployed from 0 to 4 times to both Iraq and Afghanistan. Participants also reported to have spent from 0 to 8 years apart from their spouse due to deployments during their time in the service.

Procedures

The researcher emailed a recruitment flyer to the professors from the Social and Behavioral Sciences disciplines to recruit participants for extra credit. Moreover, the student veterans office from UTPA emailed the recruitment flyer to all student veterans and dependents for the opportunity to participate and enter a drawing of a raffle of gift cards. Only those who met the specified criteria of being a male veteran and spouse/partner of a veteran were allowed to participate.

The surveys consisted of: PTSD Checklist- Military Version (PCL-M), Combat Exposure Scale (CES), Relationship Assessment Scale (RAS), and Spiritual Well-Being Scale (SWBS). The spouses were only given a survey that includes the Relationship Assessment Scale and the Spiritual Well-Being Scale. The estimated time to complete surveys was about 30 minutes. Participants were provided with a unique code and link to access online surveys in order to protect their confidentiality. At beginning of the survey, the participants were provided with the informed consent and with a list of veteran organizations that provide services for veterans (i.e. crisis line, veteran adjustment services, jobs, and education benefits). The participants who participated for extra credit were issued a certificate to provide to their professors and receive appropriate extra credit.

Measures

PTSD Checklist – Military Version (PCL-M)

The PCL-M (Weathers, Litz, Herman, Huska, & Keane, 1993) was used to measure PTSD. The PCL-M consists of a 17-item, self-report Likert-type scale that assesses symptoms of PTSD based on DSM-IV (APA, 1994). The PCL-M has a variety of purposes, including: screening individuals for PTSD, diagnosing PTSD, and monitoring symptom change during

treatment (VA National Center for PTSD, 2010). For the purpose of this study, the PCL-M was not used for screening or to provide a comprehensive assessment or diagnosis for PTSD. The PCL-M is a 5 point Likert-type that ranges from 1 (not at all) to 5 (extremely) and can be scored by obtaining the total of the symptom severity score that ranges from 0-20 (few or no symptoms), 21-29 (minimal symptoms), 30-85 (many symptoms). An example of a question that is found in the PCL-M is: How much have you been bothered in the last month by repeated, disturbing dreams of a stressful military experience? This scale has high internal consistency, test-retest reliability, and convergent discriminant validity (Pratt, Brief, & Keane, 2006). In the present study, PTSD scale was found to be reliable reporting a Cronbach's alpha of .97.

Combat Exposure Scale (CES)

Combat exposure is defined as the extent and severity of exposure to active combat (Renshaw et al., 2009) and was measured by the CES Scale (Keane et al., 1989). The CES is a seven item self-report, Likert-type scale that will be used to measure the extent and severity of exposure to active combat the veterans have experienced. The scores are obtained by answering each item on a scale from 1 to 5, with 5 reflecting more combat experience and (or) exposure. The total scores range from 1 to 41, from 1-8(light exposure), 9-16 (light to moderate exposure), 17-24(moderate exposure), 25-32 (moderate to heavy exposure), and 33-41 (heavy exposure) (Hoge et al., 2004). An example of a question that is found the CES assessment is: Where you ever surrounded by the enemy? This scale has good internal consistency, test-retest reliability, and discriminant validity (Keane et al. 1989). In the current study the Cronbach's alphas were .90.

Relationship Assessment Scale (RAS)

RAS is a seven-item, self-report, Lykert-type scale, which was used in this study to assess marital satisfaction. Marital satisfaction is operationally defined a mental state that reflects the perceived benefits of marriage to a particular person. This measure has good internal consistency and convergent validity as a measure of satisfaction in romantic relationships (Hendrik, 1988); however, in the present study, this scale was found not reliable. After deleting one of the questions that was previously reverse coded, the reliability of the scale increased to a Cronbach's alpha of .64. The reliability of the scale for the male veterans showed a Cronbach's alpha of .51, and .40 for the female spouses. Each item was answered on a scale from 1 to 5, with higher scores reflecting greater marital satisfaction and lower scores reflecting lower marital satisfaction. The total score is obtained by reverse-scoring the latter two items and then calculating the average response (Hendrik, 1988). An example of a question of the RAS assessment is: How well does your partner meet your needs?

Spiritual Well-Being Scale (SWBS)

The Spiritual Well-Being Scale was used to measure religion/spirituality (Paloutzian & Ellison, 1982). For the purpose of this study, religion is operationally defined as a strong believes and practices, which may be cultural, in a divine power. SWBS is a 20 item, self-report, Lykert-type scale, which assesses the spirituality quality of life. Each item is answered in a scale that ranges from 1 (strongly disagree) to 6 (strongly agree). The total scores are divided in two sections: Religious Well-Being Score and Existential Well-Being. The Religious Well-Being Score expresses the well-being of his/her life as expressed in relation to God. This subscale showed a Cronbach's alpha of .86. The Existential Well-Being measures how well the individual is adjusted to self, community and surrounding. Existential subscale showed a Cronbach's alpha

of .70. In a previous psychometric evaluation of the SWBS, scale showed to have a strong internal consistency reliability of Cronbach's alpha of .94; however, in the present study, scale showed a poor reliability of .47.

CHAPTER IV

RESULTS

The present study used a correlational analysis using SPSS (v.21) to determine whether higher levels of combat exposure were associated with higher levels of PTSD, and whether higher levels of PTSD were related to lower levels of marital satisfaction. Moreover, also using SPSS, a regression analysis with a moderator was used to assess if higher levels of religiosity/spirituality would serve as a buffer between combat exposure and PTSD, as well as with PTSD and marital satisfaction.

The results for the correlational analysis reported for the male veterans indicated a moderately strong relation between combat exposure and PTSD ($r=.51, p<.01$), demonstrating that as combat exposure increases, PTSD increases. In addition to this, the relation between PTSD and marital satisfaction demonstrated a moderate association ($r=-.34, p<.10$) for the male veterans. This result shows the higher the levels of PTSD, the lower levels of marital satisfaction. The correlation between PTSD and marital satisfaction for the veteran spouses indicate moderate strong relation ($r=-.62, p<.05$), meaning that as PTSD increases, marital satisfaction decreases. Thus, results support hypothesis 1 to be statistically significant (see Table 1).

To test for the second hypothesis, three regression analyses were completed. The first regression analyses were utilized to examine whether religiosity moderated the relation between

combat exposure and PTSD. To examine this, CE and Religiosity/Spirituality were entered into the first step, explaining 68% of the variance of perceived PTSD. After the entry of the interaction term between CE and Religiosity/Spirituality in the second step, the total variance explained by the model as a whole was 69%, $F(3,11)=8.08$, $p>.05$. When including both variables into the regression analyses, only spirituality showed a very strong relation to PTSD at the $p<.01$. However; spirituality did not moderate the relation between CE and Religiosity/Spirituality, $p>.05$ (see Table 2).

The second regression analyses were utilized to examine whether religiosity moderated the relation between PTSD and marital satisfaction for the male veterans. To analyze this, Religiosity/Spirituality were entered into the first step, explaining 28% of the variance of perceived marital satisfaction. The interaction term between PTSD and marital satisfaction was entered into the second step accounting for 30% for the model as a whole, $F(3,11)=1.5$, $p>.05$. The interaction effect of Religiosity/Spirituality was not statistically significant to the relation between PTSD and marital satisfaction; it did not moderate the relation, $p>.05$. None of the variables were directly related to marital satisfaction, $p>.05$. (see Table 3).

Finally, the third regression analyses were utilized to examine whether religiosity moderated the relation between PTSD and marital satisfaction for the female spouse/partner. PTSD and spirituality were entered as the first step, explaining 64% of the variance in perceived marital satisfaction, $p<.05$. After entry of the interaction term between PTSD and spirituality as the second step, the total variance explained by the model as a whole was 74%, $F(3,7)=6.8$, $p>.05$. This regression analyses showed that Religiosity/Spirituality was negative and moderately strongly related to marital satisfaction at the $p<.05$. PTSD was also found to be negative and moderately strongly related to marital satisfaction at $p<.01$. However, the interaction effect of

Religiosity/Spirituality did not moderate the relation between PTSD and marital satisfaction (see Table 4).

The three regression analyses failed to support Hypothesis 2, as results demonstrate higher levels of religiosity/spirituality do not moderate between combat exposure and PTSD, as well as between PTSD and marital satisfaction.

Table 1
Descriptive Correlations Among Independent and Dependent Variables for Males and Females

	M	SD	N	1	2	3	4	5	6
1. CE	17.75		20						
2. PTSD	41.75	18.80	19	0.51*					
3. RAS (Males)	4.10	0.54	21	-.27	-0.34				
4. RAS (Females)	3.90	0.61	23	-0.64*	-0.62*	--			
5. Spirituality (Males)	43.30	16.00	27	.45*	.83**	-.54*			
6. Spirituality (Females)	43.01	17.04	23	--	-.21	--	-.37	--	--

Note: CE= Combat Exposure; PTSD= Post-Traumatic Stress Disorder; RAS= Relationship Assessment Scale.

* $p < .05$. ** $p = .01$. + $p < .10$

Table 2
Regression Analysis Predicting PTSD for Male Veterans

Predictor	R^2	ΔR^2	B	SE B	β
Model 1	.68	.68**			
CE			.06	.30	.04
Spirituality			1.00**	.23**	.81**
Model 2	.69	.00			
CE			.02	.33	.01
Spirituality			1.00**	.26**	.78**
CE_x_Spirituality			.01	.02	.08

Note: CE= Combat Exposure

** $p < 0.01$

Table 3
Regression Analysis Predicting Marital Satisfaction for Male Veterans

Predictor	R^2	ΔR^2	B	SE B	β
Model 1	.28	.28			
PTSD			.01	.01	.36
Spirituality			-.03	.01	-.79
Model 2	.30	.02			
PTSD			.01	.01	.45
Spirituality			-.03	.01	-.80
PTSD_x_Spirituality			.00	.00	-.16

Note: PTSD= Post-Traumatic Stress Disorder
 *= $p < 0.05$, Values of .00 indicate $< .01$

Table 4
Regression Analysis Predicting Marital Satisfaction for Spouses

Predictor	R^2	ΔR^2	B	SE B	β
Model 1	.64*	.64*			
PTSD			-.02*	.01*	-.73*
Spirituality			-.02*	.01*	-.52*
Model 2	.74	.11			
PTSD			.02**	.01**	-.74**
Spirituality			-.02*	.01*	-.50*
PTSD_x_Spirituality			-.001	.00	-.33

Note: PTSD= Post-Traumatic Stress Disorder
 *= $p < 0.05$, ** $p < 0.01$, Values of .00 indicate $< .01$

CHAPTER V

DISCUSSION

Previous research that has been conducted on military trauma had mainly been focused on military service personnel. Little research has been conducted to address the influence that military trauma has on the Hispanic veteran population and even less has been focused on the impact it has on the spouses/partners. The present study addresses these issues by analyzing the impact that combat exposure experienced by the veteran husband has on their perception of marital satisfaction.

Results from the current study suggest that higher levels of combat exposure relate to higher levels of PTSD for the male veterans. These results mirror work by Renshaw et al., who found that the extent and severity of warfare combat exposure was significantly related to the veteran overall symptom severity of PTSD (Renshaw et al., 2009). Pole et al., (2001) demonstrated higher levels of PTSD symptoms in the Hispanic population as compared to Caucasians and Blacks (Pole et al., 2001). But these studies did not examine cultural processes.

In order to account for the cultural differences, the present study used religiosity/spirituality as a cultural variable that would buffer the relation between combat exposure and PTSD. The results demonstrated that religiosity/spirituality does not moderate the relation between combat exposure and PTSD; however higher levels of religiosity were directly related to higher levels of PTSD. This is contrary to previous empirical studies on trauma victims

that revealed that higher scores on religious beliefs predicted lower levels of PTSD symptoms (Chen & Koenig, 2006). However, previous research does suggest that individuals who experience traumatic events may seek religion. This may result in a positive relation between religion and PTSD. For instance, studies that have investigated the roles of religion and spirituality when people face traumatic experiences have revealed that personal faith and religion communities become the primary coping mechanism for such individuals (Weaver, Flannelly, Garbarino, Figley & Flannelly, 2003). Moreover, a study done in Israel with teenagers who faced the threat of missile attack during Persian Gulf War showed that the teenagers used religion as a way to positively cope with the traumatic stress they were experiencing (Weaver et al., 2003). Based on the results obtained for Hypothesis 2, the male veteran high levels of combat exposure, PTSD, and spirituality can be explained as the veteran seeking spirituality as a way to cope with the stress levels caused by combat exposure and symptoms of PTSD.

Further, higher levels of PTSD were related to lower levels of marital satisfaction for male veterans. Previous studies have shown that high levels of PTSD symptoms experienced by husbands may have an impact on how emotionally involved they may be in the relationship, thus, leading to decreased marital satisfaction (Monson et al., 2009). Thus, the current findings are in line with previous research. In addition to this, taking cultural values into consideration by using religiosity/spirituality as a moderator between PTSD and marital satisfaction, results from the study revealed that religiosity/spirituality does not moderate the relation between PTSD and marital satisfaction. However, when analyzing the relation between PTSD and marital satisfaction, results show a moderate negative relation. This suggests that participants experiencing high PTSD symptoms are likely to experience marital distress regardless of their religious involvement.

Similarly to the male veterans outcome, higher levels of PTSD were also related to lower levels of marital satisfaction for female spouses/partner. Previous literature has shown that since the spouses/partners are the ones more emotionally connected to their husbands, leading them to be more aware and sensitive to their husbands' traumatic experience and symptoms; husbands' PTSD levels could relate to wives lower levels of marital satisfaction (Goff, Crow, Reisbig, & Hamilton, 2007). Similar to the male veterans outcome, when taking cultural values into account by use of religiosity/spirituality as moderator between PTSD and marital satisfaction, this study revealed that experiencing religiosity/spirituality did not have an impact in the relation of PTSD and marital satisfaction.

In terms of the stress adaptation theory, results show that this group of participants have not been able to fully adapt and alter in the face of external stressful life events, such as combat exposure and PTSD, which is causing a negative impact in their marital satisfaction. Furthermore, following the Karney and Bradbury's Vulnerability Stress-Adaptation Model (1995) in such events as experiencing lower levels of marital satisfaction due to the external stressors caused by PTSD, if the couples adapt and make use of any available resources available to help cope with PTSD, they may be able to alleviate some of the stressors, thus, leading to higher levels of marital satisfaction. Furthermore, in terms of Fowler's Model of Faith Developments, results purported that due to the impact PTSD has on the marital satisfaction, both husband and wife may be able to look at the problem in a more reflective manner, therefore, seeking religiosity/spirituality as a coping strategy.

Limitations and Future Directions

The current study presents several limitations. First, this study is composed of a small group of participants and a statistical power was not conducted, which is possible that the power of this

study could have been compromised due to being a small sample (Goff et al., 2007). However, in spite of the small sample size, this study showed some significant results to contribute to the knowledge of the effects of PTSD (Wald & Taylor, 2008) on marital satisfaction among the Hispanic population.

Moreover, the sample was not recruited from a clinical sample. The results from the combat exposure and PTSD measures were not used as diagnostic tools, although results showed symptoms of trauma the scores could possibly be indicative of well-functioning participants (Goff et al., 2007). In this study, which concurs with Goff et al (2007) it was unknown if participants were diagnosed by a professional with a psychiatric disorder as a result from previous traumatic experience. However, the sample not recruited from a clinical population can also be seen as a contribution due the statistically significant results found. This study showed how a sample from outside a clinical sample showed how symptom measures (CE and PCL-M) even when not used as diagnostic measures still showed symptoms of severity affecting the male veterans and how this impacts the view marital satisfaction of both husband and spouse. This limitation could have possibly been prevented if recruitment had taken place in mental health facilities such as the Veterans Affairs and Veteran Centers.

Another implication this study faced was that due to the geographical location, participants are not active duty personnel, thus, making the current study not be representative to active duty population (Goff et al., 2007). Since there are no active duty military bases, this limitation could have not been prevented due to the geographical location. Moreover, this study provided data only on limited number of veteran and spouses from the Rio Grande Valley; thus, results may not be representative sample of broader veteran population (Goff et al., 2007). Although, attempt was made to recruit participants from the reserve units, veteran organizations,

and local university via flyers, email, direct contact, there was a limited response for participation.

In conclusion, this study provides much needed data on the effects of CE on PTSD as well as in marital satisfaction in the Hispanic population. Marital satisfaction among the current sample of male veterans and spouses is understudied in this population, while more attention has been directed to other cultures and PTSD itself. PTSD can be debilitating disorder that can cause impairments in social, occupational, physical functioning, and have an effect on marital satisfaction. Having a more clear understanding of the effects PTSD has on marital satisfaction can help researchers and clinicians in the marriage-counseling field, as well as bring awareness to military couples. This help generates several ideas for future research such as examining the effects PTSD has on marital satisfaction on female veteran population and analyzing gender differences in combat exposure and post deployment psychiatric outcomes (Luxton, Skopp & Maguen., 2010).

REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (Revised 4th ed. Washington, DC).
- Chard, K. M., Cottigham, S. M., Owens, G. P., Schumm, J. A. (2010). A comparison of OEF and OIF veterans and Vietnam veteran receiving cognitive processing therapy. *Journal of Trauma Stress, 23*(1), 25-32
- Chen, Y. Y., & Koenig, H. G. (2006). Traumatic stress and religion: Is there a relationship? A review of empirical findings. *Journal of Religion & Health, 45*(3), 371-381.
doi:10.1007/s10943-006-9040-y
- Dekel, R., Goldblatt, H., Keidar, M., Solomon, Z., & Polliack, M. (2005). Being a wife of a veteran with Posttraumatic Stress Disorder. *Family Relations, 54*(1), 24-36.
doi:10.1111/j.0197-6664.2005.00003.x
- Department of Defense (2009) Population representation in the military services: Fiscal year 2009 final report. Retrieved August 2, 2011, from [http://prhome.defense.gov/MPP/ACCESSION %20POLICY /Pop Rep2009/download/download.html](http://prhome.defense.gov/MPP/ACCESSION%20POLICY/PopRep2009/download/download.html)
- Department of Veterans Affairs (2001). Retrieved April 1, 2001, from <http://prhome.defense.gov/MPP/ACCESSION%20POLICY/PopRep2009/download/download.html>
- Fontana, A., Rosenheck, R., Spencer, H., & Gray, S. (2007). The long journey home VX. Treatment of posttraumatic stress disorder in the Department of Veteran Affairs: Fiscal year 2006 service delivery and performance. West Haven, CT: Northeast Program Evaluation Center.
- Graham, J. M., & Conoley, C. W. (2006). The role of marital attributions in the relationship between life stressors and marital quality. *Personal Relationships, 13*(2), 231- 241.
doi:10.1111/j.1475-6811.2006.00115.x
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family, 50*(1), 93-98.
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *NewEngland Journal of Medicine, 351*(1)13–22.

- Keane, T. M., Fairbank, J. A., Caddell, J. M., Zimering, R. T., Taylor, K. L., & Mora, C. A. (1989). Clinical evaluation of a measure to assess combat exposure. *Psychological Assessment, 1*(1), 53-55.
- Kessler, R. C., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the national comorbidity study. *Archives of General Psychiatry, 52*(12), 1048-1060.
- Monson, C. M., Taft, C. T., & Fredman, S. J. (2009). Military-related PTSD and intimate relationships: From description to theory driven research and intervention development. *Clinical Psychology Review, 29*(8), 707-714.
- Murdoch, M., Hodges, J., Hunt, C., Cowper, D., Kressin, N., O'Brien, N. (2003). Gender differences in service connected for PTSD. *Medical Care, 41*(8), 950-961.
- Parker, S. (2009). Faith development theory as a context for supervision of spiritual and religious issues. *Counselor Education & Supervision, 49*(1), 39-53.
- Paloutzian, R.F. & Ellison, C.W. (1982). Loneliness, spiritual well-being and quality of life. In L. A. Peplau and D. Perlman (Eds.), *Loneliness: A Sourcebook of Current Theory, Research and Therapy* (pp. 224-237). New York: Wiley Interscience.
- Pratt, E. M., Brief, D. J., & Keane, T. M. (2006). Recent advances in psychological assessment of adults with posttraumatic stress disorder. *Cognitive-behavioral therapies for trauma* (2). 34-61
- Pole, N., Best, S. R., Metzler, T., & Marmar, C. R. (2005). Why are hispanics at greater risk for PTSD? *Cultural Diversity and Ethnic Minority Psychology, 11*(2). 144-161.
doi:10.1037/1099-9809.11.2.144
- Pole, N., Best, S. R., Weiss, D. S., Metzler, T., Liberman, A. M., Fagan, J., & Marmar, C. R. (2001). Effects of gender and ethnicity on duty-related posttraumatic stress symptoms among urban police officers. *Journal of Nervous and Mental Disease, 189*(7), 442-448.
- PTSD and the Military (2009). Department of Veterans Affairs. Retrieved from <http://www.myhealth.va.gov>
- Renshaw, K. D., Rodrigues, C. S., & Jones, D. H. (2009). Combat exposure, psychological symptoms, and marital satisfaction in National Guard soldiers who served in Operation Iraqi Freedom from 2005 to 2006. *Anxiety, Stress & Coping: An International Journal, 22*(1), 101-115. doi:10.1080/10615800802354000.
- Rothman, J., Gant, L. M., & Hnat, S.A. (1985). Mexican-American Family Culture. *Social Service Review, 59*(2), 197-215

- Sayer, N. A., Clothier, B., Spoont, M., & Nelson, D. B. (2007). Use of mental health treatment among veterans filing claims for posttraumatic stress disorder. *Journal of Traumatic Stress, 20*(1), 15-25. doi:10.1002/jts.20182
- Spoont, M. R., Hodges, J., Murdoch, M., & Nugent, S. (2009). Race and ethnicity as factors in mental health service use among veterans with PTSD. *Journal of Traumatic Stress, 22*(6), 648-653. doi:10.1002/jts.20470.
- The Mexican-American Boom: Births Overtake Immigration. (2011). The Pew Hispanic Center. Retrieved from <http://pewhispanic.org/reports/report.php?ReportID=114>
- Wald, J., & Taylor, S. (2008). Response to interoceptive exposure in people with posttraumatic stress disorder (PTSD): A preliminary analysis of induced anxiety reactions and trauma memories and their relationship to anxiety sensitivity and PTSD symptom severity. *Cognitive Behavior Therapy, 37*(2), 90-100.
- Weathers, F.W., Litz, B.T., Herman, D.S., Huska, J.A., & Keane, T.M. (1993). *The PTSD Checklist (PCL): Reliability, validity, and diagnostic utility*. Paper presented at the meeting of the International Society for Traumatic Stress Studies, San Antonio, TX.
- Weaver, A. J., Flannely, L. T., Garbarino, J., Figley, C. R., & Flannely, K. J. (2003). A systematic review of research on religion and spirituality in the Journal of Traumatic Stress. *Mental Health, Religion & Culture, Vol 6*, 2003)

BIGRAPHICAL SKETCH

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