

Theses and Dissertations

---

2018

## Protective factors for posttraumatic stress disorder among second generation combat veterans

Carlos J. Perez

Follow this and additional works at: <https://digitalcommons.pepperdine.edu/etd>

---

### Recommended Citation

Perez, Carlos J., "Protective factors for posttraumatic stress disorder among second generation combat veterans" (2018). *Theses and Dissertations*. 927.  
<https://digitalcommons.pepperdine.edu/etd/927>

This Dissertation is brought to you for free and open access by Pepperdine Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Pepperdine Digital Commons. For more information, please contact [Katrina.Gallardo@pepperdine.edu](mailto:Katrina.Gallardo@pepperdine.edu), [anna.speth@pepperdine.edu](mailto:anna.speth@pepperdine.edu), [linhgavin.do@pepperdine.edu](mailto:linhgavin.do@pepperdine.edu).

Pepperdine University  
Graduate School of Education and Psychology

PROTECTIVE FACTORS FOR POSTTRAUMATIC STRESS DISORDER AMONG  
SECOND GENERATION COMBAT VETERANS

A clinical dissertation presented in partial satisfaction  
of the requirements for the degree of  
Doctor of Psychology

by

Carlos J. Perez

April, 2018

Thema Bryant-Davis, Ph.D. - Dissertation Chairperson

This clinical dissertation, written by

Carlos J. Perez

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirement of the degree of

DOCTOR OF PSYCHOLOGY

Doctoral Committee:

Thema Bryant-Davis, Ph.D.

Daryl Rowe, Ph.D.

Capt. Gerald J Novak, Ph.D. (USAF)

© Copyright by Carlos J. Perez (2018)

All Rights Reserved

# TABLE OF CONTENTS

|  | Page |
|--|------|
| LIST OF TABLES .....   | vi   |
| DEDICATION .....   | vii  |
| ACKNOWLEDGEMENTS .....   | viii |
| VITA .....   | ix   |
| ABSTRACT .....   | x    |
| INTRODUCTION .....   | 1    |
| Psychological Responses to Intergenerational Trauma.....           | 5    |
| Parenting & Parent-Child Relationship.....                         | 7    |
| Protective Factors/Resilience/Posttraumatic Growth.....            | 9    |
| Attachment .....   | 13   |
| Coping .....   | 14   |
| Critique and Need for Further Study.....                           | 18   |
| METHODS .....  | 21   |
| Participants .....   | 21   |
| Procedure.....   | 21   |
| Measures.....  | 23   |
| Data Analysis .....  | 25   |
| RESULTS .....  | 27   |
| Quantitative .....   | 27   |
| Qualitative .....  | 32   |
| DISCUSSION.....  | 39   |
| Clinical Implications.....   | 47   |
| Limitations.....   | 48   |
| Conclusion.....  | 51   |
| REFERENCES .....   | 54   |
| APPENDIX A: Notice of Approval for Human Research.....             | 62   |
| APPENDIX B: Referrals to Mental Health Providers in the Area ..... | 64   |

|   | Page |
|---|------|
| APPENDIX C: Recruitment Flyer.....                | 66   |
| APPENDIX D: Demographic Information.....          | 67   |
| APPENDIX E: Qualitative Interview Questions ..... | 69   |
| APPENDIX F: WHO – ASSIST V3.0.....                | 69   |
| APPENDIX G: Trauma History Questionnaire .....    | 76   |
| APPENDIX H: Adult Attachment Scale .....          | 76   |
| APPENDIX I: Post-traumatic Growth Inventory ..... | 77   |
| APPENDIX J: Prescreening Script.....              | 79   |

## LIST OF TABLES

|   | Page |
|---|------|
| Table 1. Demographic Characteristics of the six Participants .....                          | 27   |
| Table 2. Prevalence and Risk Level by Substance, based on ASSIST responses .....            | 29   |
| Table 3. Mean and Standard Deviation of Post-traumatic Growth Scores.....                   | 29   |
| Table 4. Prevalence of Traumatic Life Events, based on responses from THQ .....             | 30   |
| Table 5. Descriptive Statistics and Internal Consistency of AAS .....                       | 30   |
| Table 6. Mean Scores on Dimensions of Attachment derived from AAS .....                     | 31   |
| Table 7. Pearson’s Correlation among Adult Attachment Scale Dimensions and PTG Scores ..... | 31   |

## DEDICATION

This is dedicated to my father Victor M. Perez, a Vietnam veteran, who provided me with love and safety, and early in life taught me the value of an education. Also, to my younger brother Jorge A. Perez, who left this life to soon, but continues to give me strength and courage to succeed.



## ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my wife Maria A Perez, who waited patiently by my side as I pursued my educational goals, and my two little boys Jorge and Andres, who on numerous occasions relieved me from writing so that I could engage in floor-time. Also to my eldest brother Mario J. Perez, who has always been my role-model and a source of motivation to seek academic success.

I would like to thank Neva Chauppette, Psy.D. for giving me the gift to pursue a doctoral degree and for an opportunity to reach my potential. I want to express my sincerest appreciation and gratitude to David Elkins, Ph.D. who helped me find my path within this profession and provided clarity as I searched for purpose and meaning.

Thank you to my committee members, Thema Bryant-Davis, Ph.D. (Chairperson), Daryl Rowe, Ph.D., and Capt. Gerald Novack, Ph.D. (USAF), who provided guidance and support as I navigated through this process. Their insight and feedback prompted me to work harder and challenged me to think critically about the task in front of me.

I would also like to thank the individuals who assisted with my data analysis, Sylvia De Anda and Lindsay Rankin.

Sincere thanks to my friend Melissa Wasserman, Psy.D. who kept me going as we pursued personal a project that honored our loved ones.

Finally, I want thank my research participants and fellow soldiers who trusted me to tell their stories. Without you, this project would not have been possible. Thank you for sharing time and space with me, and helping me “drive on” during this challenging process.

## VITA

**CARLOS J. PEREZ, M.A.**EDUCATION

- 09/2013-02/2018      **Pepperdine University**  
**Graduate School of Education and Psychology**  
Los Angeles, CA  
Doctor of Psychology
- May 2013              **Pepperdine University**  
**Graduate School of Education and Psychology**  
Los Angeles, CA  
Master of Arts, Psychology
- May 1998              **Universidad de Guadalajara**  
**Escuela Superior de Cultura Fisica y Deporte**  
Guadalajara, Jalisco, Mexico  
Bachelor of Science, Physical Education

CLINICAL EXPERIENCE

- 08/2016-07/2017      **Casa Pacifica Center for Children and Families**  
Camarillo, CA  
Supervisor: Casey Wake, Psy.D.
- 09/2015-07/2016      **LAC-USC Adult Neuropsychological Assessment**  
Los Angeles, CA  
Supervisor: Nora Jimenez, Ph.D.
- 09/2014-07/2015      **Central Juvenile Hall**  
Los Angeles County Department of Mental Health  
Los Angeles, CA  
Supervisor: Nazo Wahab, Psy.D.
- 09/2013-06/2016      **Pepperdine Community Counseling Center**  
Encino, CA  
Supervisor: Anat Cohen, Ph.D.

## ABSTRACT

Research has consistently examined the effects of intergenerational trauma among children of combat veterans and the negative impact this has on psychological functioning. The current study explored the relationship between attachment style, post-traumatic growth, and Post-traumatic stress disorder (PTSD) among second generation combat veterans. A sample of male combat veterans from Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) were included in the study ( $n = 6$ ). The was an exploratory study that utilized a mixed-methods approach to explore lived experiences. Descriptive statistics, as well as correlation analysis were conducted to examine associations among quantitative variables. Results from qualitative analysis revealed several themes on how relational patterns and combat experiences can serve as either risk factors or protective factors for PTSD. Quantitative analysis found that veterans with secure attachment style endorsed less psychological symptoms when compared to fellow veterans with anxious/avoidant attachment patterns. Veterans with anxious/avoidant attachment styles had higher post-traumatic growth scores, were more likely to misuse alcohol, and had a history of mental health treatment. The study lays the groundwork for future studies to explore protective factors among second generation combat veterans. It also highlights the importance of early attachment experiences and how these impact an individual's ability to regulate future stress, such as combat.

## Introduction

Intergenerational transmission of trauma, or secondary traumatization, has been defined as “the impact of trauma experienced by one family member on another family member of a younger generation, regardless of whether the younger family member was directly exposed to the traumatic event” (Kaitz, Levy, Ebstein, Faraone, & Mankuta, 2009, p. 160). Studies have demonstrated that the consequences of traumatic events are not limited to those involved in the traumatic experience, and often affect significant others such as family, friends and caregivers (Dekel & Goldblatt, 2008). This vicarious traumatization suggests that previously non-traumatized persons acquire trauma like responses similar to the individual who has endured highly stressful events, an effect that has been seen in the children and grandchildren of Holocaust survivors (Danieli, 1998; Lev-Wiesel, 2007; Steinberg, 1989; Wiseman, Metz, & Barber, 2006) and in children of war veterans (Dekel & Goldblatt, 2008; Harkness, 1993; Motta, Joseph, Rose, Suozzi & Leiderman, 1997; Rosenheck & Fontana, 1998a; Rosenheck & Fontana, 1998b). Furthermore, Figley (1995) describes that this secondary traumatization resulting from the negative consequences experienced by people can be caused indirectly or secondarily. Dekel & Goldblatt (2008) contend that the mechanism in which trauma or symptoms among veterans’ families can be either direct or indirect, and found this to occur among families that include a father with PTSD. Direct transmission involves symptoms of numbness, anxiety, and dissociation transmitted directly onto child, whereas indirect involves the distress that arises from growing up in a stressful, often violent environment (Dekel & Goldblatt, 2008). This trauma can also emerge out of the remembrance of atrocities committed on a specific group or subgroup of people (i.e. historical trauma).

There have been many studies that have examined the effects of trauma among several populations and cultures, notably among Native Americans, which have been found to have higher rates of trauma, especially historical trauma and PTSD. Native Americans suffer from higher rates of PTSD when compared to the general population, and they are the highest ethnic group to provide military services, especially during Vietnam War, which has led to the development of an intergenerational cycle of negative mental health outcomes (Brave Heart, Chase, Elkins, & Altschul, 2011). American Indians attribute widespread psychological distress to internalized ancestral trauma stemming from colonization, racism, broken treaties, genocidal policies, and poverty (Belcourt-Dittloff & Stewart, 2000; Hartmann & Gone, 2016; Soto, Baezconde, Schwartz & Unger, 2015). Psychological dysfunction can manifest in several ways. For instance, Native American youth are at higher risk for developing emotional and behavioral problems, and more likely to be exposed to domestic violence and poverty (Mashunkashey-Shadlow, 2007). Rates of substance use were also found to be higher among Native American youth when compared to same age peers, primarily alcohol, tobacco, and marijuana (Cwik et al., 2017; Soto et al., 2015). Historical trauma has also negatively impacted other domains within American Indians, such as family dynamics, and academic achievement. For example, American Indians, make up less than 1% of college population in the United States, and have the highest dropout rates among those enrolled (Flynn & Sangganjanavanich, 2015).

Several studies have been conducted that examine the effects of intergenerational trauma in Holocaust survivors. Studies have explored communication patterns from parent to child (Braga, Mello, & Fiks, 2012; Danieli, 1998; Lichtman, 1984; Wiseman et al., 2002), intrusive thoughts, anxious behavior, avoidance behavior (Lev-Wiesel, 2007), parenting style, the transmission of fear and mistrust (Rowland-Klein & Dunlop, 1998), and emotional experiences

of anger and guilt (Wiseman, Metzler, & Barber, 2006) in second and third generation Holocaust survivors. Many studies have taken a qualitative approach and examined themes and meanings of second-generation Holocaust survivors' narratives (Braga et al 2012; Lev-Wiesel, 2007; Wiseman et al. 2006). Additionally, various studies have evaluated protective and resiliency factors in first, second, and third generation Holocaust survivors (Barel, Van IJzendoorn, Sagi-Schwartz & Bakersman-Kranenburg, 2010; Giladi & Bell, 2013; Shmotkin, Shriria, Goldberg & Palgi, 2011). In contrast, some studies have concluded that there are no effects of transmission of secondary trauma in the children and grandchildren of Holocaust survivors (Fridman, Bakermans-Kranenburg, Sagi-Schwartz, & Van IJzendoorn, 2010; Leon, Butcher, Kleinman, Goldberg & Almagor, 1981).

Secondary trauma in veterans is viewed as the transmission of war experiences from war veterans to their children (Motta et al., 1997). Multiple studies have focused on identifying the consequences of traumatic experiences during combat in adults and the impact this has on their children. Several clinical and empirical studies have reported lower self-esteem, poorer family functioning and emotional and psychiatric disturbances in both wives and children of Vietnam Veterans with PTSD, likely due to the high incidence of divorce, marital conflict, and domestic violence among them (Davidson & Mellor, 2000; Rosenheck & Nathan, 1985). Similarly, American Indian Vietnam Veterans were found to be more isolated post-deployment, and were more likely to be hostile, engage in substance use, and to have been divorced once or several times (Beals et al., 2002). These veterans were also more likely to exhibit interpersonal problems impacting parenting and family dynamics, which often contributed to self-blame and sense of helplessness among family members (Beals et al., 2002). Among children of Vietnam veterans, almost half were found having had used illegal drugs, more than a third reported behavioral

problems and almost half reported significant PTSD (Beckham et al., 1997). Harkness (1993) found that children of violent fathers who served in war were more likely to have behavior problems, poorer school performance and less social competence. Additionally, his study revealed that family violence as a result of the father's PTSD predicted greater distress in the children, suggesting that the consequences of the diagnosis itself are likely to have a greater effect on intergenerational transmission than PTSD itself (Deckel & Goldblatt, 2008). Earlier studies by Rosenheck and Fontana (1998) found that some children tend to manifest the same adjustment problems related to their father's traumatic experience.

Most studies seem to suggest that children of war veterans with PTSD are more likely to have negative outcomes and very few have examined the development of resilience and posttraumatic growth among some children as a result of positive parenting and attachment style on the part of veteran parents. It is recommended that further studies not only identify negative outcomes of having a parent with PTSD, but also the benefits and positive outcomes, and how these might decrease the prevalence of PTSD among the children of veterans who also experience combat.

Despite the paucity of research in regards to veterans and their sons who also have combat experience, Rosenheck and Fontana (1998a) were able to look at veterans whose fathers served in combat and identified several findings of note. Veterans whose fathers had a history of combat experience scored higher in PTSD symptoms, psychiatric symptoms, suicidality, guilt and loss of religious faith. Also, veterans with PTSD whose fathers served in combat had more severe PTSD, more survivor guilt, less social support, and were more likely to meet criteria for lifetime panic disorder and drug abuse. Despite the similarities in previous research regarding the

effects of secondary trauma in children of war veterans, particularly Vietnam veterans, the literature is still scarce (Dekel & Goldblatt, 2008).

### **Psychological Responses to Intergenerational Trauma**

The symptoms endorsed by those with second generational trauma can cause distress and dysfunction in their lives (Danieli, 1998). Furthermore, Lev-Wiesel (2007) explains that both the children and grandchildren of individuals who have experienced significant life traumas appear to be negatively affected by the traumatic event. Some of the proposed symptoms experienced by those with intergenerational trauma have spanned across psychological and familial/interpersonal domains. The knowledge of the traumatic event as it occurred in a family member is associated with specific behaviors and emotions that surround the secondary traumatic stress experience. These behaviors and emotions can present as nearly identical to those presented in individuals with posttraumatic stress disorder (Figley, 1995). Rosenheck and Nathan (1985) in their treatment of children of combat veterans noted that the children often internalize the lived traumatic experiences of the parent creating a frightening reality despite never being in a combat situation. Additionally, the Diagnostic and Statistical Manual- 5<sup>th</sup> Edition (DSM-V) has included “Learning that the traumatic event(s) occurred to a close family member or close friend” to the exposure diagnostic criteria of Posttraumatic Stress Disorder (American Psychiatric Association, 2013, p. 271).

The psychological effects of secondary traumatization can include various posttraumatic responses including intrusive imagery, heightened sense of vulnerability, emotional numbing, and difficulty building trust in relationships (Dekel & Goldblatt, 2008). Depression, self-destructive behavior, anxiety, alcohol and tobacco use, somatic symptoms, and guilt have been among the most commonly reported responses to trauma by Native Americans in general



(Hartmann et al., 2016). Among children of Native American war veterans, the Matsunaga Vietnam Veterans Project Research has found that there is a higher rate of anxiety and aggression in adolescent children of veterans with Posttraumatic Stress Disorder compared to children of non-veterans (Ahmadzadeh & Malekian, 2004). High rates of depression, behavior disturbance (Harkness, 1993; Lev-Wiesel, 2007; Rosenheck & Fontana, 1998a) and emotional problems (Parsons, Kehle, & Owen, 1990) have also been linked to children of veterans who have been exposed to traumatic events. Children of Vietnam veterans endorsed more posttraumatic symptoms, higher levels of suicidality, more guilt, and less social support than children of non-combat veterans. Furthermore, veterans with Posttraumatic Stress Disorder who had combat veteran fathers were more likely to meet criteria for panic disorder and substance abuse than those with Posttraumatic Stress Disorder whose fathers were noncombat veterans (Rosenheck & Fontana, 1998b).

Earlier studies by Rosenheck and Fontana (1998b) found that some children tend to manifest the same adjustment problems related to their father's traumatic experience, this highlights the role of abusive violence or atrocities as a factor adversely affecting parent-child relationship. Many veterans who have participated in abusive violence, such as a combat environment, have extreme difficulty forming trusting intimate relationships. According to Haley (1985), this phenomenon has been observed to be associated with intra-familial violence, substance abuse, and extreme difficulty forming nurturing parental bonds. Veterans with PTSD have been found to have difficulties fulfilling traditional family roles such as those of being a husband and father, as well routines of family life (Caselli & Motta, 1995).

Additionally, children of Holocaust survivors have presented with symptoms that parallel their parents' which may include depression, anxiety, and guilt (Steinberg, 1989). Studies have

examined intrusive thoughts, anxious behavior, avoidance behavior (Lev-Wiesel, 2007), and emotional experiences of anger and guilt (Wiseman, Metz, & Barber, 2006) in second (and third) generation Holocaust survivors. Felsen (1998) explains that psychological functioning in second generation survivors display a greater propensity to anxiety, depressive experiences and psychosomatic complaints. These findings allow us to conclude that traumatic exposure can have lasting psychological effects on subsequent generations.

### **Parenting & Parent-Child Relationship**

Studies also show the effect of the parent's traumatic exposure on parent-child relationships. In parents who have experienced a traumatic event, their pathology may emerge in the way that they relate to their child. Parents who have been exposed to trauma may feel too overwhelmed by their own distress to be cognizant of their child's emotion dysregulation (Kaitz et al., 2009) or emotional turmoil. One study that looked at the relationship among Vietnam veterans and their children, suggested that emotional numbing led to poor relationship quality by decreasing a father's ability to seek, and engage in positive interactions (Ruscio, Weathers, King, & King, 2002). Detachment, estrangement, and emotional unavailability which characterize emotional numbing, along with interpersonal difficulties appear to be commonly experienced by combat veterans (Caselli & Motta, 1995; Ruscio et al., 2002). Another factor that has been found to affect the parent-child relationship is the way the trauma is communicated within the familial context. The communication of trauma between parents and children is significant in the intergenerational transmission of distress (Dekel & Goldblatt, 2008). An absence of communication about the parent's traumatic experience may result in consequences for the child. For instance, lack of knowledge or some knowledge can lead to a child filling in the missing details, often creating a more horrific story than the real one (Dekel & Goldblatt, 2008). In

contrast, too much disclosure of unsuitable information can overwhelm a developing child and their cognitive abilities. Kaitz and colleagues (2009) contend that the nonverbal and verbal communication about the traumatic event helps the child understand the parent's emotional experience. In their mixed methods study among combat veterans (Sherman et al., 2015), found that veterans were less likely to communicate PTSD due to personal barriers and the consequences of disclosing. However, Danieli (1998) explains that the trauma will be transmitted to further generations regardless of whether or not the survivor discussed the traumatic event with their child.

The studies regarding communication of traumatic exposure in Holocaust families are divided as to whether Holocaust communication has a positive or negative impact on the second generation's psychological well-being. Lichtman (1984) found that traumatic communication to the second generation was significantly related to personality characteristics of anxiety, paranoia, hypochondriasis, and low ego strength. However, Wiseman and colleagues (2002) explain that the survivor's ability and willingness to talk openly about traumatic experiences is related to lower levels of psychological distress in second generation.

There has been emerging literature that has looked at parental trauma history and its effects on parenting. Banyard (1997) found that parents' own abuse histories are risk factors for negative consequences in the parenting role, including the use of more punitive, aggressive and physical discipline. In their study of mothers with a variety of interpersonal trauma in both childhood and adulthood, Banyard, Williams, and Siegel (2003) found that overall higher levels of trauma exposure were linked with decreased levels of parental satisfaction, reports of child neglect, and use of physical punishment. Schore (2001) suggest that early negative attachment experiences or "relational trauma" from the social environment impact mental health and

capacity for emotional self-regulation. Emerging literature on the impact of post combat PTSD symptoms on veterans' family life indicates that both male and female veterans' PTSD symptoms are associated with decreased levels of parenting satisfaction, which is defined as a parent's feeling of efficacy and enjoyment related to parenting, as well as a perception of the quality of the parent-child relationship (Berz et al., 2008). In male Vietnam veterans, PTSD symptoms were associated with parental satisfaction and poorer attachment levels with their children, possibly resulting in secondary trauma and increased risk for mental health problems (Palmer, 2008). Furthermore, research on PTSD continues to demonstrate that military children may be at greater risk relative to civilian children due to negative parent-child interactions, which appear to be related to some degree to how parenting skills, attachment, hostility, and violence are impacted by PTSD symptoms and impairment. In summary, clinical evidence indicates that PTSD symptoms can negatively affect a parent's functioning and ability to parent effectively, and can have far reaching consequences (Cohen et al., 2008)

### **Protective Factors/Resilience/Posttraumatic Growth**

The Centers for Disease Control and Prevention (CDC) define protective factors, as individual or environmental characteristics, conditions, or behaviors that reduce the effects of stressful life events. These factors also increase an individual's ability to avoid risks or hazards, and promote social and emotional competence to thrive in all aspects of life, now and in the future. Garmezy (1991) viewed protective factors as the ability to moderate emotions, cope with stressors, and manifest positive responsiveness to stressors. A well-researched protective factor, resilience is viewed as a positive adaptive behavior in response to the vulnerability of risk, in this case trauma and the development of psychopathology (Agaibi & Wilson, 2005). In the psychosocial literature, resilience has been defined as the process of adapting well in the face of

adversity, trauma, tragedy, threats of harm, or even significant sources of stress (Yehuda & Flory, 2007).

Despite the similarities in defining resilience as a protective factor, some researchers suggest that resilience has not taken into account an individual's cultural and contextual differences (Ungar, 2011). Researchers identify resilience as a quality of individuals that reflects their capacity to engage in processes that make it likely they will overcome adversity and achieve normal or exceptional levels of psychosocial development (Ungar & Liebenberg, 2011). For example, few studies take into account the effect of cultural immersion into the dominant culture and the heterogeneity of ethno-racial minorities themselves, suggesting that there are many differences among dominant and non-dominant cultures in regards to the ability to overcome stressful events and what this means for each (Ungar & Liebenberg, 2011). Ungar (2008), provides a socio ecological definition of resilience:

In the context of exposure to significant adversity, resilience is both the capacity of individuals to *navigate* their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to *negotiate* for these resources to be provided and experienced in culturally meaningful ways. (p. 225)

Although there appear to be several negative psychological, relational, biological and physiological effects of intergenerational or secondary traumatization, it is important to note that every individual exists within their own dynamic contextual framework. Mediators and moderators of secondary trauma may change one's susceptibility to secondary traumatization. It is important to investigate positive or strength-based factors that may also affect those with intergenerational trauma like coping and resiliency.

Studies have evaluated protective and resiliency factors in both the first and second-generation Holocaust survivors. Giladi and Bell (2013) conclude that self-differentiation and open family communication are correlated with lower levels of traumatic stress in second generation survivors. Van IJzendoorn, Bakermans-Kranenburg, and Sagi-Schwartz (2003) note that the survivors' pre-war positive experiences (i.e. strong social support) may serve as a protective factor in first generation survivors and that positive pre-war interpersonal relationships also help to create post-trauma resiliency. These positive experiences and relationships may have allowed the survivor to be psychologically well-adjusted post war. Similarly, the building of post-war social support may also have created a buffer to psychological maladjustment after the war (Van IJzendoorn et al., 2003) which may have led to more adaptive coping skills. Religious coping has been found to promote resilience and psychological adjustment following a traumatic experience (Bonanno, 2004). Additionally, research has found that positive religious coping is a protective factor to long-term effects of extreme trauma (Palgi, Shrira, Ben-Ezra, 2011) such as the Holocaust or prolonged exposure to combat.

Very few studies have focused on the positive effects or outcomes of children of combat veterans. Most studies focus on comparing children who have fathers with PTSD against those who have fathers who have never been exposed to an intense trauma. Despite these comparisons, some studies have found that there are no differences in self-esteem or psychological distress (Westerink & Giarratano, 1999). Recently, studies have begun to look at how a traumatic event, in this case combat, can be seen as a "benefit" to reduce the development of PTSD. Some studies have looked at ways to reduce PTSD after trauma exposure, for example, Wood and Britt (2011), view *benefit finding* as a coping mechanism useful for managing the aftermath of war. Benefit finding reflects a positive psychological approach to the

management of stress and trauma and is characterized by the ability to find benefit in and following adverse circumstances and stressors. For example, in their study among veterans, Wood and Britt (2011) found that benefit finding was associated with lower levels of PTSD and depression.

Posttraumatic growth (PTG) is defined as a positive psychological change that an individual experiences after being exposed to and struggling with an adverse traumatic event (Tedeschi & Calhoun, 2004). Within PTG, there are five domains in which psychological change can occur: personal strength, appreciation of life, relating to others, new possibilities, and spiritual change. According to Tedeschi and Calhoun (2004) change does not arise from the trauma itself, but from the individual's efforts to overcome and development of new worldview. PTG has been explored among numerous individuals who have experienced a wide range of traumas, such as cancer patients, prisoners of war (POW), war veterans, and assault survivors (Benetato, 2011; Tsai, El-Gabalawy, Sledge, Southwick, & Pietrzak, 2014). A recent study among veterans in the United States, found that half of the participants reported at least "moderate" PTG (Angel, 2015; Tsai et al., 2015). Among the PTG domains, appreciation of life, and personal strength were the most common (Tsai et al., 2015). In the same study, individuals with PTSD scored higher on the overall measure of PTG, and lower measures on resilience, which aligns with Levine et al., (2009) which asserts the resilient individuals have less PTSD and PTG. PTG studies on veterans are ideal, given their high rate of exposure to traumatic events, high proportional representation in population, recent advocacy efforts for psychological well-being, and pre-deployment preparation (Tsai et al., 2015).

## **Attachment**

The essential goal of the first years of life, is to develop a secure attachment with a primary caregiver in order to develop an emotional self-regulating capacity. Ability to manage stressful environments and develop coherent responses to these is primarily influenced by early social interactions with primary caregivers (Schoore, 2001). These episodes of social-emotional learning or parent child caregiver interactions become internalized, what Bowlby (1982) described as internal working models. These “models” or mental representations of self and others influence how we engage future social interactions, beliefs about our self, psychosocial functioning, and our ability to regulate emotions (Currier, Holland, & Allen, 2012). According to Mikulincer, Shaver, and Horesh (2006) traumatic events can activate the attachment system and the effect of these can be lessened when a veteran can recall his/her positive mental representations. Based on the work by Mary Ainsworth (1978) there are generally three attachment styles: secure, anxious-ambivalent, and avoidant. Briefly, individuals with a secure attachment are more capable of regulating distress, easygoing, empathic, comfortable with closeness, and generally form positive relationships, whereas avoidant individuals tend to be distant and extremely self-reliant, and anxious individuals need constant contact, reassurance, are passively helpless, and excessively dependent (Allen & American Psychiatric Association [APA] 2013; Dekel et al., 2004). Having a secure attachment is usually correlated with being able manage adverse and stressful situations. Secure individuals tend to utilize social support systems, have good problem-solving skills, and are optimistic in times of stress, whereas those characterized as insecure maybe more at risk during times of stress due to being less confident in their ability to manage difficulties, have limited problem-solving skills, and tending to distrust others (Dekel et al., 2004).



Several studies have looked at the war veteran's attachment style and its effect on PTSD. Cohen, Zerach, and Solomon (2011), found that fathers with PTSD and a secure attachment orientation showed greater parental involvement and lower levels of discipline than traumatized fathers with anxious or avoidant attachment orientations. Another study determined that veterans with PTSD have lower secure attachment and higher insecure attachment compared to those without PTSD (Ghafoori, Hierholzer, Howsepian & Boardman, 2008). They also noted that adult secure attachment is a possible protective factor against the development of PTSD but that issue has received little attention in the literature. In their study of war veterans and prisoners of war, Dekel et al. (2004) found that individuals with anxious and avoidant attachment styles reported more PTSD symptoms than those with a secure attachment, and conclude that attachment style, in particular secure attachment, can reduce the probability of PTSD among the war veteran and this in turn can be viewed as a protective factor for the veteran's children. Cohen, Zerach, and Solomon (2011), noted that the parenting styles of traumatized veterans has received limited empirical attention, and suggest that there is a relationship between parenting and post-traumatic stress symptoms.

### **Coping**

Successful adaptation to stress includes the way individuals manage their emotions, think constructively, regulate and direct their behavior, control their autonomic arousal, and act on social and nonsocial environments to alter or decrease sources of stress (Compas, Connor, Saltzman, Harding & Wadsworth, 2001). One way an individual adapts to stress is coping, which is a constantly evolving cognitive and behavioral effort to manage specific external and/or internal demands that are perceived as overwhelming or exceeding the resources of the person (Lazarus & Folkman, 1984). Furthermore, coping is viewed as an ongoing dynamic process that

changes in response to the varying demands of a stressful encounter or event (Compas et al., 2001). Weisz, McCabe, and Denning (1994) agree with Lazarus and Folkman (1984) that coping is goal-directed and motivational in nature, but in their model coping can be viewed as primary control coping which is intended to influence objective events or conditions and secondary control coping which refers to maximizing one's fit to current conditions. Compas et al. (2001) suggests that the regulatory processes involved in coping draw on and are constrained by the biological, cognitive, social, and emotional development of the individual.

A two dimensional model of coping has received the most attention in the empirical research and is often used as a conceptual framework for categorizing numerous other strategies (Goldenberg & Matheson, 2005). Lazarus and Folkman's (1984) dimensions of problem focused and emotion focused, reflect the function of coping responses to either act on the source of stress in the environment or palliate negative emotions that arise from a stressful encounter or event. Problem focused coping refers to attempts to respond to a problem or stressful situation by formulating a plan or approach, changing the environment to make it more bearable, or managing or escaping from the problem. Emotion focused coping involves attempts to reframe, deny or distance oneself from the problem or stressful situation (Morano, 2010). Some studies suggest that the coping style an individual adopts is a result of one's age, situational factors and inner representation (Gaylord, Gipson, Mance & Grant, 2008; Goldenberg & Matheson, 2005; Morano, 2010). For example, Irion and Blanchard-Fields (1987) found that older adults are more likely to engage in problem focused coping when they believe a stressful situation is controllable and emotion focused when they perceive they have no control over the situation; younger adults are more likely to rely on emotion focused strategies. Similarly, Compas et al. (2001) noted that in infants, early coping efforts may be oriented towards palliating negative

emotions through primary behavioral means, including seeking support and soothing from others, behavioral withdrawal from threat and use of tangible objects for soothing and security. Individuals who perceive or appraise the situation and their ability to view the situation as manageable will ultimately fare better than those who view the situation as unmanageable (Morano, 2010). In terms of inner representation, individuals who view the world as meaningful, predictable and controllable are more likely to use problem solving strategies in comparison to those who view the world as random and uncontrollable, additionally, those who have an inner representation of the world are more likely to use maladaptive coping strategies (Goldenberg & Matheson, 2005).

Problem focused coping, as well as seeking social support, which is arguably an emotion focused type of coping, generally predict better recovery from stressful events (Goldenberg & Matheson, 2005). Agaibi and Wilson (2005) in a previous study found that problem focused coping is more effective than emotion focused coping when dealing with traumatic stress. Furthermore, Lalonde and Nadeau (2012) viewed social support and problem focused coping as protective factors and reduce the development of PTSD following a traumatic event.

Studies that examine coping in Holocaust survivors conclude that the level of stress experienced by the survivor directly relates to the second generation's inability to cope with stressful life events. This may directly be linked to findings that adult children of Holocaust survivors display a higher level of distress when presented with non-life threatening events (Yehuda, Schmeidler, Wainberg Binder-Brynes & Duvdevani, 1998), which may show their poor ability to cope with negative experiences. In research conducted by Fridman et al. (2011), as survivors reported higher levels of stressful life events, their daughters also reported higher levels of stressful life events. Lev and Wiesel (2007) explain that children of Holocaust

survivors exhibit posttraumatic-like symptoms including the presence of intrusive thoughts, socially-anxious behavior, and avoidant behavior. Additionally, second generation survivors reported higher levels of childhood trauma as compared to their controls (Yehuda, Halligan & Grossman, 2001). Research also displays the epigenetic component of secondary trauma, which considers both genetic predisposition and an environmental stressor in the susceptibility of secondary traumatization (Kaitz, Levy, Ebstein, Faraone & Mankuta, 2009).

Religious coping is an understudied moderating factor to psychological well-being, particularly in Holocaust survivors and their offspring. There is minimal research conducted in the area of religious coping as it relates to second- and third- generation, however research has been conducted examining the effects of religious coping in Holocaust survivors. Studies show that religious coping is correlated with adjustment and resilience following traumatic exposure (Bonanno, 2004). Positive religious coping has been found to mediate the effects of psychological symptoms and maladjustment and buffers the long-term traumatic effect on the psychological functioning of Holocaust survivors (Palgi, Shrira, and Ben-Ezra, 2011). A study conducted by Palgi et al. (2011) shows that European-origin Israeli secular survivors reported lower psychological functioning as compared to ultraorthodox survivors. In addition, Holocaust survivors who had high levels of psychological distress reported less synagogue attendance than their less distressed counterparts who attend synagogue frequently (Brodaty, Joffe, Luscombe, & Thompson, 2004).

In summary, coping and resilience reflect distinct aspects of successful development and adaptation. The distinction being that coping refers to the processes of adaptation and resilience is reflected in outcomes for which coping has been effectively put into action in response to stress and adversity. Furthermore, coping includes the behaviors and thoughts implemented by

individuals when faced with stress, and resilience refers to the individuals coping responses that have been faced with stress and have coped in an adaptive and effective manner (Compas et al., 2001).

### **Critique and Need for Further Study**

Although there is a variety of research that identifies the prevalence of PTSD among combat veterans and how this impacts quality of life and impairs functioning, there is a paucity of research that examines the protective factors against post-traumatic stress symptoms among second generation combat veterans. According to Pietrzak, Johnson, Goldstein, Malley, and Southwick (2009), psychological resilience and social support may protect against the development of post-traumatic stress and other psychological impairments. Furthermore, psychological resilience and related factors such as hardiness, are characteristics that enable individuals to adapt positively to adversity and reduce psychopathology. These factors along with higher perceived social support are negatively correlated with PTSD.

A library search of children of veterans, resilience and PTSD yielded very few results. Most of the articles were a product of a search entry that consisted of children of veterans and PTSD only. There was only one study that looked at the development of PTSD among children of veterans (Rosenheck & Fontana, 1998a) who themselves have gone to war. This study looked at Vietnam veterans who served in combat. Most of the studies that I found focused on the negative effects of having a father with PTSD with little attention to protective factors that can result from this, in particular to the possible war experience of the child and how this might act as a buffer to prevent PTSD. Additionally, there were many studies that addressed the relationship between PTSD among parents and parental satisfaction. These studies pointed out the negative effects of this relationship but failed to recognize that despite being a commonality

within this population, was unable to identify what factors might contribute to increased parental satisfaction.

Studies have found that resilience can be a result of a traumatic experience and yet no studies that I found mentioned resilience in combat veterans. Most of the studies also looked at the intensity of the traumatic event and how this related to the family dynamic. It should be noted that this literature is limited as prior investigators have not attended to the potential protective factors among veteran families nor to cultural dynamics. Some studies have suggested that there are differences in coping strategies among ethnic groups and it would be important to look at how these influence a person's ability to cope in a war time environment.

My study sought to identify protective factors that may contribute to the non-development of posttraumatic stress symptoms after deployment to a combat environment. Most studies demonstrate the negative outcomes of combat experience and how this leads to difficulties later in life in regards to emotional and psychological well-being. Despite these findings, few studies identify the factors that contribute to positive outcomes. For example, Elder and Clipp (1989) in their study of combat veterans and emotional health found that it is important to look at who the combat veteran is prior to deployment. This suggests that a person's life history and experience, such as previous trauma, resilience, and relationships play an important role in how an individual will adapt to a stressful situation. Although most studies are consistent in finding that negative events predict negative outcomes, this study aims to challenge this view by identifying the determinants that predict and allow some individuals to adapt successfully and what differences contribute to the absence of post-traumatic stress symptoms.

Given the limited empirical research that focuses on the positive outcomes of being an adult child of a combat veteran, the researcher conducted a small exploratory study using a mixed-methods approach emphasizing on qualitative components, to gain insight into the lived experiences of the participants and how these factors negatively or positively affect their future reactions to combat.

## **Methods**

### **Participants**

After receiving full Institutional Review Board (IRB) approval (see Appendix A), six combat veterans who participated in either Operation Iraqi Freedom or Operation Enduring Freedom and had a parental figure who was also in a combat environment (i.e., Vietnam War, Persian Gulf War) were recruited. The study employed a convenience sample and used two methods for recruitment. The first method entailed recruitment of participants via email to a listserv from local and national Veterans Organizations, such as Veterans of Foreign Wars, Iraq and Afghanistan Veterans of America, and Student Veterans of America (see Appendix C). The second method was through contacting local Military Units, Veteran Organizations, Veteran Resource Centers, Veteran Outpatient Clinics, School Based Veteran Organizations, and Department of Veterans Affairs in the County of Los Angeles and providing a flyer announcing the purpose of the study in attempts to identify potential candidates (see Appendix C). The recruitment email and flyer notified potential candidates about the purpose of the study and the monetary compensation of \$20.00 for their participation.

### **Procedure**

This was an exploratory study utilizing qualitative and quantitative data components to examine the relationship between protective factors, and self-reported PTSD symptoms among second generation combat veterans. Individuals who expressed interest in participating in the study were briefed on the inclusion criteria via telephone and asked screening questions to determine their eligibility (see Appendix J). In order to identify participants who would be most useful for the study, as well as to optimize external/internal validity, increase feasibility, and sample homogeneity the following inclusion criteria were developed: (a) deployment to either



Iraq or Afghanistan theater of operations, (b) combat experience as evidenced by being awarded the Combat Action Badge, (c) be a son of a Combat Veteran, (d) exposure to a stressful event during combat, (e) able to participate psychologically and physically, give informed consent; and (f) be between the age of 18-45. After difficulties with recruitment, changes were made to inclusion criteria to include a broader range of participants. Upon IRB approval, a specific change was made to item (c) of original inclusion criteria “be a son of a combat veteran” to no combat experience was necessary for the parent. Thus, the study sample included 6 male children of military veteran who were: (a) deployed to Iraq/Afghanistan, (b) awarded combat badge or ribbon, (c) son of a “military” veteran, (d) exposure to stressful event during combat, (e) able to participate psychologically and physically, and (f) between the age of 18-45. Also, exclusion criteria of PTSD diagnosis and substance abuse treatment were removed; therefore individuals with self-reported history of PTSD symptoms and/or substance use were included in the study. Selected participants were informed via phone about the purpose and goals of the study and received a brief explanation about the interview process and measures. Those who did not meet eligibility criteria were thanked for their time and informed that they did not meet criteria. Individuals who met initial criteria were scheduled for a semi-structured interview at one of the Pepperdine campuses to ensure privacy and confidentiality. The limits of confidentiality were explained to all participants and informed consent was obtained. Participants were offered a copy of the informed consent (see Appendix A) and received a copy of mental health referrals should they experience any emotional distress due to their participation in study. During the first part of the study demographic data was collected (see Appendix D) and participants were asked to complete several measures on substance use, attachment, trauma history and traumatic growth. Upon completion of the measures, individual’s participated in a semi-structured qualitative

interview. Semi-structured in-depth interviews are the most widely used in qualitative research and can be administered individually or in group. Individual interviews allows for a more intimate process where social and personal matters are expressed, and where meanings of life experiences are shared (DiCicco Bloom & Crabtree, 2006). During the interview, participants were reminded that the study was voluntary and they could choose to discontinue if they needed to do so. All participants were offered a break after completion of the quantitative measures and given enough time to reflect and answer questions during the interview.

After completion of the interviews, which averaged about 35 minutes each, the participants were given an opportunity to share any relevant information that might have been overlooked during the interview process. The participants then received compensation and were thanked for their participation in the study.

## **Measures**

**Demographics.** Demographic data (see Appendix D) collected from the participants included age, gender, race, ethnicity, educational level, years of military service, rank, number of deployments, OEF/OIF veteran and marital status.

**Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) – World Health Organization.** The ASSIST (see Appendix F) was used to assess lifetime and recent frequency of use with several substances. It consists of eight questions that cover ten different substances including alcohol, tobacco, opioids, sedatives, hallucinogens, cannabis, cocaine, inhalants, amphetamine type stimulants, and “other drugs” (Humeniuk, et al., 2008). Based on a five point likert scale that ranges from “never” to “almost daily,” the respondents were asked to answer questions regarding lifetime use and frequency of use in the last three months (Questions 1-5) and further assess for compulsion, dependence and harm. The remaining questions (6-8),

consist of assessing for lifetime and recent problems, expressed concern from family or relatives, prior attempts to stop and current or previous injection drug use.

**Trauma History Questionnaire (Green, 1996).** The trauma history questionnaire (THQ; see Appendix G) was designed to gather information via self-report from general, community, and clinical populations about lifetime exposure to a range of potentially traumatic events. The THQ consists of 24 yes/no items that measure a range of traumatic events in three areas: (a) crime related events, (b) general disaster and trauma; and (c) unwanted physical and sexual experiences. Respondents are asked to identify if they have experienced any of these events, and if so, are asked the number of time and age of the occurrence (Hooper, Stockton, Krupnick & Green, 2011). Due to the nature of the THQ, it is not scored but identifies the total number of types of traumatic events and also in which areas a traumatic event most occurred. The crime related events area has 4 items, general disaster and trauma has 13 items and unwanted physical or sexual experiences consist of 6 items. In regards to psychometric properties (i.e. reliability, validity) the THQ is relevant and adaptable to a wide range of populations. Empirical studies demonstrated the performance and psychometric soundness of the THQ, and is a good choice for capturing trauma history.

**Revised Adult Attachment Scale (Collins, 1996).** The Revised Adult Attachment Scale (AAS; see Appendix H) consists of 18 items. Participants are asked to respond to each question by rating it on a Likert scale (1 = *Not at all characteristic of me*, 5 = *very characteristic of me*). The purpose of this scale is to assess how an individual generally feels about their close relationships, in this case about their father. Results of this scale are able to identify an individual's attachment style based on Ainsworth's work on attachment that categorized individuals into secure, avoidant and anxious (Collins & Read, 1990). Normed on 406 college

students at the University of Southern California, Collins and Read (1990) reported internal consistencies (coefficient alpha of .75, .69, and .72) respectively for the depend, close, and anxiety subscales, and test-retest reliabilities after a 2-month interval were .71, .68, and .52, respectively. Research has demonstrated that the three subscales yielded acceptable internal consistencies. Validity for the AAS was determined by using a cluster analysis and suggested concurrent validity with Hazan and Shaver's (1987) attachment style measure (Collins & Read 1990).

**Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996).** The Posttraumatic Growth Inventory (PTGI; see Appendix I) consists of 21 items that measure how successful participants, coping with the aftermath of trauma are able to overcome the negative events. Specifically, this inventory was used to identify participants coping abilities and positive outcomes to traumatic events. It consists of five subscales which are: (a) relating to others, (b) new possibilities, (c) personal strengths, (d) spiritual change and (e) appreciation for life. Response options correspond to positions on a 6-point Likert scale ranging from 0 (*no change*) to 5 (*great change*). The total score (0-105) is interpreted as a measure of the magnitude (amount, degree, level, extent, number of benefits) of posttraumatic growth. Tedeschi & Calhoun (1996), report level of internal consistency reliability (Alpha = .90) and 2 month test-retest reliability ( $r = .71$ ).

### **Data Analysis**

All interviews were audio recorded and transcribed verbatim. Participant data was de-identified and assigned a numeric code to protect privacy and confidentiality. Transcripts were reviewed by the lead researcher and identified relevant themes that emerged from the data. To avoid subjectivity and researcher bias of the data, an independent coder was identified and

contracted to identify themes as well. An additional independent auditor was used to review themes to increase inter-rater reliability. The qualitative questions were designed to identify the subjective experience of the participants as they relate to the purpose of the study. In order to gain a better understanding of the individual's experience and events that they have endured a narrative approach was used for the qualitative analysis. Narrative analysis focuses on the "story itself" and seeks to preserve the integrity of personal biographies or series of events that cannot be adequately understood in terms of their discrete elements (Schutt, 1996, p. 339).

Quantitative measures were administered for the purpose of enriching the qualitative data collected and to augment findings. Exploratory nature of study provides a better understanding of the meaning life events and phenomena explored have on the individual (Bickman & Rog, 2009). Descriptive statistics were employed to describe basic features of the study and to provide a simple summary about the study and the measures used. Overall PTGI scores were also calculated based on participants attachment style (see Table 3). These measures which focus on an individual's previous trauma history, attachment style, and coping were used to support any themes that emerge from the qualitative interviews. Correlation analysis was conducted to identify relationships among attachment dimensions and post traumatic growth. The investigator realized in hindsight that this analysis was an error as the sample size was too small for significant predictive findings. Finally, relevant behavioral observations made of the participants were noted and integrated into findings.

## Results

### Quantitative

There were six male combat veterans who completed the in depth interview and study measures. Seven additional participants were screened; however, they were ineligible because they did not serve in combat or did not have a parent who served in the military. Demographic and military characteristics of the participants are shown in Table 1. The mean age was 34 years ( $SD = 6.38$ ), with a range of 27 to 43 years. All of the participants were male (100%), and most self-identified as White/Caucasian (83.3%). The veterans were well educated: 33.3% had some college or an associate degree, and 66.7% had a bachelor's degree. Three (50%) of the veterans were currently enrolled in a Master's program. Participants were predominantly enlisted (83.3%), and the primary service affiliation was Marine Corps (66.7%). All of the veterans had at least two deployments in support of OEF (Afghanistan) or OIF (Iraq), and 66.7% had more than 3. The participants were no longer on Active duty, or Reserve status at the time of the interviews.

Table 1

*Demographic Characteristics of the Six Participants.*

| Characteristic         | No. (%)       |
|------------------------|---------------|
| Age (years)            |               |
| Mean, SD               | 34.3, SD 6.38 |
| Median                 | 34            |
| Range                  | 27-43         |
| Gender                 |               |
| Male                   | 6 (100)       |
| Race                   |               |
| Black/African American | 1(16.7)       |
| White/Caucasian        | 5(83.3)       |
| Branch of Service      |               |
| Marines                | 3(50)         |
| Navy                   | 2(33.3)       |
| Army/Marines           | 1(16.7)       |

(continued)

|                                       |         |
|---------------------------------------|---------|
| Rank                                  |         |
| Enlisted                              | 5(83.3) |
| Officer                               | 1(16.7) |
| Theater of Operations                 |         |
| OEF (Afghanistan)                     | 1(16.7) |
| OIF (Iraq)                            | 2(33.3) |
| Both OEF/OIF                          | 3(50)   |
| Years of Military Service             |         |
| 4-8                                   | 2(33.3) |
| 9-12                                  | 2(33.3) |
| ≥20                                   | 2(33.3) |
| Number of Deployments                 |         |
| 2                                     | 2(33.3) |
| 3-5                                   | 2(33.3) |
| 6-9                                   | 1(16.7) |
| ≥10                                   | 1(16.7) |
| Marital Status                        |         |
| Married                               | 4(66.7) |
| Divorced                              | 2(33.3) |
| Present Educational Level (completed) |         |
| Some college                          | 1(16.7) |
| Associate Degree                      | 1(16.7) |
| Bachelor's Degree                     | 4(66.7) |

---

Prevalence of lifetime and substance use in the past three months was based on responses to questions 1 and 2 of the ASSIST 3.0 (see Table 2). Eighty-three percent of veterans reported lifetime use of tobacco, and marijuana, while all (100%), reported lifetime use of alcohol. Half (50%), endorsed lifetime use of cocaine, and 33.3% reported use of at least one other drug. Rates of current use were 33.3% for tobacco, 100% for alcohol, and 16.7% for marijuana. Alcohol was the substance with highest prevalence for current and lifetime use. Risk level was measured using the standard ASSIST cutoffs in which participants were either categorized as low risk (no intervention) or moderate risk (brief intervention). Two of the participants were identified as having moderate risk for tobacco, whereas, all were either at low risk (33.3%) or moderate risk (66.7) for alcohol use.

Table 2

*Prevalence and Risk level by Substance, based on ASSIST responses.*

| Substance Category | Lifetime use,<br><i>n</i> (%) | Current Use<br><i>n</i> (%) | Low Risk<br><i>n</i> (%) | Moderate risk,<br><i>n</i> (%) |
|--------------------|-------------------------------|-----------------------------|--------------------------|--------------------------------|
| Tobacco            | 5 (83.3)                      | 2 (33.3)                    | --                       | 2 (100)                        |
| Alcohol            | 6 (100)                       | 6 (100)                     | 2 (33.3)                 | 4 (66.7)                       |
| Marijuana          | 5 (83.3)                      | 1 (16.7)                    | 1 (16.7)                 | --                             |
| Cocaine            | 3 (50)                        | --                          | --                       | --                             |
| Amphetamines       | --                            | --                          | --                       | --                             |
| Inhalants          | 1 (16.7)                      | --                          | --                       | --                             |
| Sedatives          | 1 (16.7)                      | --                          | --                       | --                             |
| Hallucinogens      | --                            | --                          | --                       | --                             |
| Opioids            | 1 (16.7)                      | --                          | --                       | --                             |
| Other              | --                            | --                          | --                       | --                             |

The mean PTGI score of the veterans was 59.17 ( $SD = 18.4$ ). The means, standard deviations, and ranges for the PTGI subscales are shown in Table 3. The highest mean score among the five PTGI subscales was relating to others ( $M = 19$ ,  $SD = 9.36$ ) followed by new possibilities ( $M = 14.17$ ,  $SD = 8.04$ ), personal strength ( $M = 12.83$ ,  $SD = 4.54$ ), appreciation of life ( $M = 10$ ,  $SD = 5.37$ ), and spiritual change ( $M = 3.17$ ,  $SD = 3.87$ ).

Table 3

*Mean and Standard Deviation of Posttraumatic Growth Scores.*

|                                   | Overall      | Secure      | Attachment |              |
|-----------------------------------|--------------|-------------|------------|--------------|
|                                   |              |             | Anxious    | Avoidant     |
| Posttraumatic growth (PTGI total) | 59.17(18.40) | 58(35.36)   | 49         | 63.33(11.93) |
| PTGI Subscales                    |              |             |            |              |
| New Possibilities                 | 14.17(8.04)  | 11.5(14.85) | 14         | 16(6.25)     |
| Personal Strength                 | 12.83(4.54)  | 8(2.82)     | 15         | 15.33(3.51)  |
| Spiritual Change                  | 3.17(3.87)   | 3(2.83)     | 0          | 4.33(5.13)   |
| Appreciation of Life              | 10(5.37)     | 13.5(2.12)  | 15         | 6(4.58)      |
| Relating to Others                | 19(9.36)     | 22(12.73)   | 5          | 21.67(4.51)  |

The most frequently reported traumatic events on the THQ were ‘exposed to dangerous chemicals/radioactivity threatening health’ (100%), ‘situation which you feared you might be



killed' (100%), 'seen someone seriously injured or killed' (100%), and 'engaged in combat' (100%). Most of the veterans (83.3%) also endorsed having 'seen or having to handle dead bodies, and being 'beaten, spanked, or pushed by family member causing injury' (see Table 4).

Table 4

*Prevalence of Traumatic Life Events, based on responses from THQ.*

| Traumatic Event  | n (%)    |
|--|----------|
| Crime related events   |          |
| Someone tried to take something by force/threat                                    | 2 (33.3) |
| Someone attempted to rob you or actually robbed you                                | 2 (33.3) |
| Someone attempted and succeeded breaking into your home                            | 2 (33.3) |
| General Disaster and Trauma  |          |
| Serious accident anywhere  | 4 (66.7) |
| Natural disaster where you/loved ones in danger of death/injury                    | 2 (33.3) |
| Exposed to dangerous chemicals/radioactivity threatening health                    | 6 (100)  |
| Other situation were seriously injured   | 3 (50)   |
| Situation which you feared you might be killed                                     | 6 (100)  |
| Seen someone seriously injured or killed   | 6 (100)  |
| Seen or had to handle dead bodies  | 5 (83.3) |
| Received news of injury, life-threatening illness or death of someone close to you |          |
| Engaged in combat while in military service  | 6 (100)  |
| Physical and Sexual Experiences  |          |
| Forced to have sex against will  | 1 (16.7) |
| Fondled under force or threat  | 2 (33.3) |
| Attacked with weapon by family member or friend                                    | 1 (16.7) |
| Beaten, spanked, or pushed by family member causing injury                         | 5 (83.3) |

Table 5 demonstrated the differences among the attachment dimensions corresponded closely to the attachment styles identified in previous research by Collins and Read (1990).

Table 5

*Descriptive Statistics and Internal Consistencies of the AAS.*

|                  | Attachment Subscales |              |             |
|------------------|----------------------|--------------|-------------|
|                  | Close                | Depend       | Anxiety     |
| Mean (SD)        | 18.5 (5.68)          | 15.33 (5.09) | 13.5 (6.66) |
| Cronbach's Alpha | .757                 | .742         | .686        |

Among the six veterans, two had high scores on Close and Depend coupled with low scores on Anxiety which classified them as having a secure attachment style. Additionally, one individual had a high score on Anxiety coupled with moderate scores on Close and Depend, suggesting an anxious attachment. The remaining three individuals had low scores among the attachment dimensions, categorizing them as having an avoidant attachment style (see Table 6).

Table 6

*Mean Scores on the Dimensions of Attachment derived from the AAS.*

| Adult Attachment Scale Dimension | Attachment Style |         |          |
|----------------------------------|------------------|---------|----------|
|                                  | Secure           | Anxious | Avoidant |
| <i>N</i>                         | 2                | 1       | 3        |
| Close                            | 24.5             | 22      | 13.30    |
| Depend                           | 18.5             | 17      | 12.67    |
| Anxiety                          | 8.33             | 25      | 10.33    |

A Pearson correlation coefficient (see Table 7) was computed in order to assess the relationship among attachment style dimensions and posttraumatic growth scores which in hindsight was error given the sample size. As one would predict, the findings were not significant.

Table 7

*Pearson's Correlation among Attachment Style Dimensions and PTG Scores.*

|        |             | AAS<br>Close | AAS<br>Depend | AAS<br>Anx | PTGI  | NP     | RTO   | PS    | SC    | Appr. |
|--------|-------------|--------------|---------------|------------|-------|--------|-------|-------|-------|-------|
| AAS    | <i>R</i>    | 1            | .373          | .558       | .027  | -.090  | -.038 | -.667 | .087  | .803  |
| Close  | <i>Sig.</i> |              | .467          | .250       | .959  | .865   | .943  | .140  | .869  | .055  |
| AAS    | <i>R</i>    | .373         | 1             | .118       | -.001 | .170   | -.315 | .003  | -.623 | .740  |
| Depend | <i>Sig.</i> | .467         |               | .824       | .999  | .748   | .543  | .996  | .186  | .093  |
| AAS    | <i>R</i>    | .558         | .118          | 1          | .161  | .294   | -.379 | .109  | .043  | .650  |
| Anx    | <i>Sig.</i> | .250         | .824          |            | .761  | .572   | .459  | .837  | .936  | .163  |
| PTGI   | <i>R</i>    | .027         | -.001         | .161       | 1     | .924** | .679  | .355  | .598  | .130  |
|        | <i>Sig.</i> | .959         | .999          | .761       |       | .009   | .138  | .490  | ..210 | .807  |

(continued)

|       |             |       |       |       |        |      |       |       |       |       |
|-------|-------------|-------|-------|-------|--------|------|-------|-------|-------|-------|
| NP    | <i>R</i>    | -.090 | .170  | .294  | .924** | 1    | .391  | .632  | .327  | .218  |
|       | <i>Sig.</i> | .865  | .748  | .572  | .009   |      | .443  | .178  | .527  | .678  |
| RTO   | <i>R</i>    | -.038 | -.315 | -.379 | .679   | .391 | 1     | -.165 | .652  | -.330 |
|       | <i>Sig.</i> | .943  | .543  | .459  | .138   | .443 |       | .755  | .161  | .522  |
| PS    | <i>R</i>    | -.677 | .003  | .109  | .355   | .632 | -.165 | 1     | -.123 | -.197 |
|       | <i>Sig.</i> | .140  | .996  | .837  | .490   | .178 | .755  |       | .816  | .708  |
| SC    | <i>R</i>    | .087  | -.623 | .043  | .598   | .327 | .652  | -.123 | 1     | -.193 |
|       | <i>Sig.</i> | .869  | .186  | .936  | .210   | .527 | .161  | .816  |       | .715  |
| Appr. | <i>R</i>    | .803  | .740  | .650  | .130   | .218 | -.330 | -.197 | -.193 | 1     |
|       | <i>Sig.</i> | .055  | .093  | .163  | .807   | .678 | .522  | .708  | .715  |       |

*Note.* \*\* Correlation is significant at the 0.01 level (2-tailed).

### Qualitative

Semi-structured interviews were audiotaped and transcribed verbatim. The study sample included six male combat veterans who served in Iraq, Afghanistan, or both. All of the participants had at least two deployments, and military experience ranged from four to over twenty years (see Table 1). Analysis of data included reading and re-reading the transcripts by lead researcher and independent coder to improve inter-coder reliability. Statements and phrases that were identified as significant were organized thematically as themes or sub-themes by each researcher. Themes were summarized and discussed by both researchers until consensus was reached. Final themes were shared with auditor for further validation; suggestions and recommendations were incorporated into analysis.

The following themes emerged from participant responses during the semi-structured interviews: potential risk factors for PTSD, and protective factors for PTSD.

**Potential Risk Factors for PTSD.** Within this general theme, participants shared their perceptions about how being a son of a military veteran could have negatively impacted functioning in several domains.

**Relational.** This theme captured participant's reports of father-son interactions and how they viewed the relational patterns with their father. For instance, when asked to characterize their relationship with their fathers who had served in the military, several participants noted a sense of disconnection. One veteran stated "he only got close when intoxicated." Another participant mentioned leaving home to get away from a "volatile" home environment" and that joining the military was the "fastest and easiest way out." Several veterans noted that a sense of disconnection from their father led them to be more independent. The following comment reflects this situation: "he always did things by himself, he didn't want help. So I feel as much as I try not to be like that, its affected me that I tend to be distant and try to do everything myself." Similarly a participant when asked about his relationship with his father and how combat experiences might have affected him stated "it made me more dependent and reliant on myself. He wasn't a dad; he was the guy in charge until it was time for me to go."

**Communication.** Themes related to communication that emerged during interviews included: communications of combat experiences, general communication style, and effect on parenting. Several veterans not only characterized their father as distant and perceived having little communication with them, but also felt that combat impacted their ability to fulfill traditional parenting roles. For example, the following statement reflects such experience "combat experience left a mark with him...it stayed with him permanently and negatively impacted his ability to be a father and a husband." Another veteran noted that after his father's return from combat, his father "was very quiet" and that "he made sure to stay away from the family as much as possible." In regards to knowing about their father's combat experiences and how this was communicated, most of the participants denied ever hearing or knowing about such experiences. The following statement reflects this shared experience "he just never talked about

it much; I'm still trying to this day to try to get him to open up and tell me about it." Another veteran notes "he doesn't talk about it til this day. Even though I'm a combat vet and I've tried to approach it, he doesn't." Of the ones that did acknowledge learning about them, it was mostly when their fathers were drunk. For instance one veteran notes "I remember a story one night when he was drinking, I don't even know how it came up, but it was something about the military."

**Family Dynamics.** This theme emerged when participants reflected on childhood experiences of divorce, or separation. All of the participants noted growing up in a single parent household or with a step-mother or step-father; however, separation or divorce was not directly attributed to their fathers' combat experience. One veteran expresses how he viewed his father after divorce "he was just a dad on the weekends." Another participant when describing his step-father notes "we weren't really close" and that the relationship continued to be "equally distant." One veteran stated that several divorces minimized his ability to form loving relationships with subsequent female caregivers and led to "behavioral problems".

**Combat.** This theme encapsulates participant's reflections on combat experiences and perceived effects on mental health. Some participants shared about death and loss, while others talked about guilt. For example in regards to loss, one soldier shares:

"...you got a guy reading 145 names of soldiers who died in combat while you are standing at the position of attention, full battle rattle and it's 110 degrees...I'm 21 at the time, these cats is 18, 19, 20, and they are never coming home."

Another states "I have seen more friends die than I care to admit." Another veteran reported feeling "responsible" for the loss of several soldiers when describing a set of events during a

confrontation with the enemy. One veteran when asked about post-war adjustment reflects on his return:

“My pops, he didn’t understand me when I got home, he just thought I was a crazy marine, but I told him, pops, I can never be normal again, I can never go back to who I was...that put my PTSD, my anxiety, my rage, my anger, my depression, my hopelessness, things of that nature into perspective, I could never be the old me.”

Another veteran, who had multiple deployments and high rates of combat exposure mentioned “I’m not convinced, I’ve dealt with it effectively.” In addition with struggling post-war, four of the six participants endorsed PTSD symptoms or some form of sequelae such as substance use due to their combat experiences, and three acknowledged a PTSD diagnosis. One veteran expressed “the mother of my children, she really helped me get through the nightmares and the cold sweats, and a lot of the stuff when I first came back from Iraq...I don’t want PTSD, if I could get rid of it now, I would.” Another participant when sharing about his military experience states:

“A lot of people who struggle like myself, when I struggled was because I was thinking of it, constantly...what I felt was negative, a consistent negative thought, drowning it with booze, drowning it with being alone.”

When talking about his post-war adjustment, this is how one veteran described himself “I got out of the Marine Corps, and for two years I was an asshole getting into trouble, just lost.” For others, alcohol use appears to soothe the negative effects of combat, for instance a veteran notes “PTSD is only when I start thinking about it, and I drown it with drinking.” Despite the negative experiences for most and agreeing that “war is horrible” and a “necessary evil,” all would return

to a war zone if required. It is important to note that combat experiences among participants were also different and varied in regards to number of deployments, combat exposure, and length of deployments. Some veterans had multiple deployments and for longer periods of time, while other were deployed to shorter less hazardous environments.

**Protective Factors for PTSD.** Despite endorsing a history of traumatic events and identifying potential risk factors for PTSD, several protective factors and coping strategies emerged.

**Social Support.** This theme encapsulates experiences of social support by family members. For instance, veterans identified several relational supports that have helped buffer the negative experiences of war, including their father or step-father. Despite reported negative interpersonal experiences at a young age, some expressed having a “good relationship” with their father now. For example, some of the participants interviewed received positive support and messages prior to their deployments. One veteran stated “I think that was the first time he said he loved me, before I went to Iraq...” He goes on to mention that knowing about his father’s deployment gave him “assurance” that he would be “alright.” One participants viewed his father as “his best friend” while another saw his as “supportive”. Another veteran reported that working at the veteran resource center at his school provided him with a “therapeutic” opportunity by doing public speaking and sharing his experiences with fellow soldiers. Similarly, two participants noted that they have maintained contact with fellow troops which have provided them with social support, for example “the friends I had in the marine corps. We had a group of core guys that I still keep in touch with to this day...probably the main thing.” All but one veteran noted that their spouses and family were also able to provide support during

difficult times. One veteran stated that the mother of his children was responsible for minimizing symptoms related to PTSD.

**Self-Reliance.** Themes related to self-reliance and independence was coded when individuals expressed some form of perceived growth despite adverse events. The majority reflected on their military experience and how their experiences in this environment reinforced this attribute. One veteran explains:

“I’m a soldier, but I think for myself. I know what is right, I know what is wrong, and

I’m not a hero, I just do my job as a soldier, as a warrior, as a marine.”

Despite the different reasons for joining the military all the veterans described having a sense of duty and a willingness to return to a combat environment if their country required it. Many expressed the importance of family, most importantly the military family. All eluded to a sense of brotherhood and commitment to their brethren, for example “almost every single individual that I deployed with, I would trust my life and give my life for...” For another soldier who had spent half his life in the military, this is how he described combat when he asked if he would return to be with his brothers “in a heartbeat, combat is the only place where shit makes sense.” For another veteran, this is how he dealt with adversity “I don’t let it affect me, affect my life”.

**Purpose and Meaning.** Themes related to a sense of purpose and meaning also emerged during the qualitative interviews. For instance, participants generally noted that their combat experiences provided them with moments of reflection where they thought about death, and what they would do if they survived. For most, reflections and memories of family and children were most prominent and appeared to be the reason that gave them the will to live and survive. Many of the participants attributed the relationship with their children as a means to moving forward



and finding purpose. For example, one participant stated “I live for my children.” For another veteran, negative childhood parenting interactions have contributed to his efforts of being a “good father” and ending the negative cycle he experienced. One veteran noted that his reason for separating from the military was due to the fear of missing out on his son’s developmental milestones of “walking and talking.” Other veterans have also found academic achievement and learning as way to improve well-being and mental health outcomes. Education and having a career post-military appeared to provide purpose for most of the participants; three were in higher education, while the remaining individuals were in enrolled in some form of educational/career program.

## Discussion

The results of this exploratory study provide information on the relationship between attachment, post-traumatic growth, and self-reported PTSD symptoms among a cohort of six second generation combat veterans.

The consequences of having a father exposed to combat have been well documented. Most studies have highlighted the negative outcomes of these children, while few have identified possible protective factors for PTSD. Based on the qualitative interviews, all of the participants reported several experiences that have impacted their emotional well-being in some way, while also noting some facilitators that have helped them overcome negative experiences. These potential risk factors and protective factors are discussed further.

Among the six participants in this study, two were identified as having a secure attachment; three were classified as avoidant, while the remaining individual was classified as anxious. In a study of war veterans, individuals classified with a secure attachment were less likely to endorse trauma related symptoms, and suggest having a secure attachment as a protective factor against PTSD (Dekel et al., 2004; Ghafoori et al., 2008). Currier (2009) found that returning OEF/OIF veterans with secure attachment were less likely to endorse psychological distress, misuse alcohol, and have higher perception of social support. Resilience, as well as social support has been identified as possible protective factors for the development of traumatic stress and depression among veterans (Pietrzak et al., 2009). It has also been found to protect against the development of PTSD among Vietnam veterans and reservists. Additionally, post-war social support has also been found to reduce traumatic stress and depressive symptoms. In this study, individuals with a secure attachment style did not endorse symptoms related to post-traumatic stress disorder or mental health treatment during the qualitative interviews. In

fact, these individuals identified several sources of social support that have assisted with post-war adjustment, such as spouse and children. Interestingly, these two individuals were subject to parental separation at a young age, and one of the two reported a “disconnected” relationship with father. It is possible that these two individuals benefited from a maternal caregiver who provided regulated interpersonal experiences to buffer future distress and adversity. In contrast, the remaining individuals who were classified as either anxious or avoidant, reported a history of mental health treatment due to a history of PTSD symptoms, which they attributed to traumatic experiences. As Pietrzak et al. (2009) highlights, there is a large number of OEF/OIF veterans returning from their deployments with PTSD or psychological symptoms impacting post-war adjustment. Dekel et al. (2004) also found that veterans who were treated for combat related stress were less likely to have a secure attachment. This insecure classification among the participants has been identified as a risk factor that may weaken an individual’s resilience during stressful events (Dekel et al., 2004). The avoidant individuals in this study scored in the moderate range among the attachment dimensions. That is, based on their responses they were more likely to be uncomfortable with closeness and intimacy, not confident in partner’s availability, and not worried about being abandoned. In essence, these individuals have a tendency to be less trusting of others and likely prefer being alone. These individuals exhibit a diminished relatedness, an excessive need for autonomy (Allen & APA, 2013), and self-reliance. For example one participant considered himself “extremely self-reliant” when asked about early relational patterns with his father. Bessel van Der Kolk (2014) described these individuals as “dealing but not feeling” (p. 116). One participant who was classified as avoidant explains “I have blunted affect, so I have a limited range of emotions...I deal with traumas, incidents, positive and negative in a super logical fashion versus going to the emotional side.” During the

semi-structured interviews, the individuals with an avoidant attachment also provided the least amount of narrative during their responses, which is likely associated with the relational patterns consistent with being a son of a combat veteran, rejecting, neglectful, and disconnected (Siegel, 2012). For example when one veteran asked about what he remembered most about his father he simply stated “strict but fair” and did not elaborate further. The literature has pointed to post-combat social support buffering the effects of psychological distress among combat veterans; however, the participants in this study appeared to receive little benefit from this due to their insecure attachment style. For instance, although two of the three avoidant individuals were married, during the qualitative interviews they appeared indifferent when describing these relationships and seemed to minimize the benefits of this support system. The other was divorced, and used negative emotionally expressive language when completing questions on the closeness dimension of the AAS. Possibly confounding their ability to deal with traumatic stress and general everyday activities, these individuals when compared to returning veterans without PTSD, are more likely to experience intrusion and avoidance symptoms (Pietrzak et al., 2009).

The literature has pointed to the negative effects of being a child of a combat veteran, in particular in regards to substance use. For instance, Rosenheck & Fontana (1998b) found the 2<sup>nd</sup> generation combat veterans were more likely to meet criteria for substance use. In this study, all veterans self-reported lifetime use of alcohol use, pre-deployment, which has been found to be a risk factor for the development of PTSD (Green, Grace, Lindy, Glessner, & Leonard, 1990). Interestingly, the four individuals who were classified as either anxious or avoidant also had higher scores on the ASSIST for alcohol use, and deemed at moderate risk requiring some form of intervention. Currier (2012) in his study of OEF/OIF veterans, found that those with an insecure attachment style were more likely to misuse alcohol and report more emotional distress.

One veteran describes his alcohol use, “I consider myself a functioning alcoholic, I drink heavy, it’s getting better now.” All veterans in this study reported parental alcohol use, and some reported alcohol use negatively impacting their relationship with their father. For example one participant noted “he was distant...my father only got close when intoxicated.” Studies have well established the effects of alcohol use in attachment relationships, in particular among returning war veterans. As noted earlier, parents exposed to combat are less likely to engage with their children, can be controlling and overprotective, and emotionally unavailable (Paris, Devoe, Ross, & Acker 2010). One veteran stated “I suppress my feelings with alcohol, “while another expressed “drowning” his negative thoughts with “booze.” This is not surprising since findings from Veterans Affairs (VA) studies have identified veterans with PTSD as being three times more likely to have a co-morbid substance use disorder when compared to those without PTSD (Sofuoglu, Rosenheck & Petrakis, 2014). Moreover, recent studies among outpatient and inpatient Iraq and Afghanistan war veterans found comorbid PTSD and substance use rates at 20% and 39% respectively (Fontana & Rosenheck, 2008).

This study also looked at trauma history and potentially traumatic events as potential risk factors or opportunities for posttraumatic growth. All of the veterans in this study reported exposure to at least 4 traumatic events in their lifetime (see Table 4). These findings are consistent with Bolton et. al. (2001) who looked at potential traumatic events as risk factors and rendering soldiers vulnerable to combat experiences and subsequent development of PTSD. They highlighted the importance of identifying exposure to potentially traumatic events prior to deployment in efforts to prevent further psychological distress. This is important given that the soldiers in this study were not only exposed to traumatic events, but were also children of combat veterans, predisposing them to psychological symptoms. This suggests that for the

participants in this study, as well as veterans in general, there are multiple risk factors associated with the development of PTSD. Despite the risk factors identified within this cohort of participants, it is unknown what other variables besides combat could have contributed to self-reported PTSD symptoms. A replication study utilizing diagnostic measures for PTSD symptoms would help identify further risk factors. In this study, individuals classified with an insecure attachment style were the only ones that self-reported PTSD symptoms or diagnosis, while securely attached individuals denied the presence of these during qualitative interviews. In addition to the self-reported reported traumatic experiences, all of these participants were subject to social ecological factors further impeding their growth. All reported a history of parental separation or divorce, a sense of disconnection from their fathers, limited communication, parental substance use and loss of family, all potential risk factors for further emotional distress. Futures studies that look at these variables and the impact these have on mental health among veterans would be invaluable.

There have been limited studies have looked at the role of attachment, resilience, and post-traumatic growth among second generation combat veterans.

A correlation analysis was performed to explore the relationship between attachment styles and posttraumatic growth. Studies appear to neglect this relationship; however, one study conducted by Salo (2005), found that a secure attachment was related to growth among torture victims. There were no significant p-values among the attachment dimensions and post-traumatic growth, likely due to the small sample size. Future studies with larger sample size could explore associations among attachment and PTG among combat veterans. The mean PTGI in this study was 59.17 ( $SD = 18.40$ ), which mirrors to the study of war amputees ( $M = 59.1$ ,  $SD = 23.5$ ; Benetato, 2011), likely due to the shared combat experiences among combat veterans.

Avoidant individuals scored highest in overall PTGI when compared to fellow veterans, likely due to a higher perception of negative and adverse events. Interestingly, the avoidant individuals in this study who reported some type of PTSD symptom scored highest among overall PTGI score. This aligns with Tsai's et al. (2015) where veterans with PTSD were more likely to score higher on PTG than resilient veterans. Securely attached individuals scored highest in relating to others. These individuals are more likely to embrace and form meaningful relationships. Interestingly, individuals with an avoidant classification also scored highest in this domain. Despite these individuals being characterized as less likely to form trusting relationships and self-reliant; relating to others appeared to be an important domain of growth for them. It is possible that within PTG and the domain of relating to others, responses were based on interpersonal interactions in the military. For instance, most of the participants acknowledged continued communication with soldiers they served with, and have likely developed an increased sense of empathy and need for closeness based on the experiences they shared. Future studies can help make the distinction among support systems and which are more important to veterans. The majority of the participants identified a spouse or intimate partner who has provided emotional support during difficult times, regardless of attachment style. It appears that relationships become more important post-combat due to the shared experiences of loss, not only physical, but social. Many of the veterans expressed a willingness to return to combat and be with their brethren, which suggests that in all likelihood they formed deep connections in the military, connections that have been torn due to separation from service. The military can provide a sense of belonging and relatedness, experiences that were likely absent for most of these individuals as children. For the avoidant individuals, military separation and post-war adjustment are likely leading to early memories of rejection and disconnection, thus their

attempts to undue these negative cycles of early emotional unavailability by caregivers and connect with other human beings are a sign of post traumatic growth. For instance, veterans in this study alluded to the strong emotional connection they had with their children. These findings support the importance of social support as a primary protective factor for returning war veterans. Veterans who were classified as anxious and avoidant also scored higher on personal strength when compared to securely attached individuals. This is also in accord with Tsai et al. (2015) who identified personal strengths and appreciation of life as the most common areas of growth. Personal strengths are inherently related with an individual's perceived vulnerability in times of stress (Tedeschi & Calhoun, 2004). These veterans have not only proven to be self-reliant, but have also overcome several experiences that given them a sense of accomplishment. The lowest score among all participants was spiritual change ( $M = 3.17, SD = 3.87$ ). This is similar to the findings by Benetato (2011) in her study of OEF/OIF veterans ( $M = 3.91, SD = 3.65$ ). Possible explanations for the low scores among the participants are several; for example one veteran talked about the war environment itself and expressed that "war is horrible, there was nothing good about it." Another likely explanation is perceived atrocities that occur and the consequences of combat, one soldier explains "we leveled that country, we destroyed that country...we decimated the country" Also, children of combat veterans have also reported a loss of religious faith. Moreover, the spiritual change domain consists of only two questions, thus making in it difficult to gauge true growth in this domain. Recently, Tedeschi et al. (2017) explored the psychometric soundness of the spiritual change domain and determined that adding additional questions related to spiritual growth and meaning were more likely to produce growth within this domain. Further studies utilizing this measure with the inclusion of new items "Spiritual-Existential Change" can provide an opportunity to help veterans identify what gives



them purpose. One area that appeared to be a protective factor among all, especially among the avoidant group, was education. Two of the veterans classified as avoidant were in a graduate program and the other was seeking pursuing a nursing career. As Green et al. (1990) notes, education has been found to instill a sense of purpose, and distract from the horrors one has experienced. Overall, veterans in this study self-reported some form of posttraumatic growth via the PTGI. Individuals who endorsed PTSD symptoms appeared to score highest among PTGI score when compared to those who did not report PTSD symptoms. It is noteworthy to mention that all veterans in this study experienced an event where they feared they might be killed, similar to Tsai et al. (2015), which identified a positive association with a life threatening illness or injury and PTG. They further explain that such a terrifying event where death is imminent can serve as a “wake-up call” and instill a greater appreciation for life, a need to increase social support, and stimulate a search for meaning and purpose.

This was the first study to my knowledge that examined the role of attachment as a protective factor for second generation combat veterans. As the literature has established, being a son of a combat veteran can predispose you to future mental health problems, such as substance use, behavioral problems, low academic achievement, and exposure to volatile home environments. This study was able to identify individuals with different attachment styles and highlight the importance of identifying not only pre-combat traumatic events and existing psychological distress, but one’s ability to regulate emotions. An attachment relationship influences how one copes with stress and interacts in social interactions (Schore, 2001). Moreover, a secure attachment promotes one’s ability to effectively regulate future stressors, and impacts how we relate to others later in life. In this study, individuals with insecure attachment styles were more likely to endorse psychological distress and reported experiences consistent

with previous studies. Similarly, individuals who were identified as secure reported less emotional distress despite being exposed to several traumatic events. This study examined the relationship with one's father and what perceived effect it had on their emotional well-being, interestingly none of the veterans reported a positive relationship. In fact, all of the veterans generally described having a poor relationship with their father, and characterized early childhood experiences with their father as being disconnected. This study highlights previous findings related to intergenerational effects of trauma among children of veterans, and explores the role of attachment among these individuals and its effect on mental health, specifically as it relates to PTSD. An examination of an individual's attachment style and emotion regulation abilities pre-deployment are essential for the prevention of post-war psychological distress. This supports Elder and Clipp's (1989) notion that one must know who the veteran is in terms of emotional health prior to deployment. Identifying at risk soldiers pre-deployment, could potentially reduce the development of PTSD and suicide rates among veterans. Interestingly, all participants agreed, in that some form of early mental health interventions prior to deployment could have assisted with post-war difficulties.

### **Clinical Implications**

This study expands the current research that exists regarding the sequelae of war among veterans. It is important that people working with second generation veterans not only explore the intergenerational effects of trauma, but focus on the early attachment experiences and its effect on right brain development and affect regulation. Studies tend to focus on several risk factors that put veterans at risk for the development of PTSD; but few explore the soldier's ability to regulate emotions and the impact it has on mental health. Many of the soldiers returning from a combat environment were young and likely exposed to more combat due to age

and rank. It is important that clinicians working with veterans develop a solid understanding of attachment theory, and explore early relational patterns among them. As a veteran, we are less likely to share experiences of combat, and have a tendency to mistrust civilian clinicians, unless we feel safe and understood; which lies at the core of attachment. For some, any perception of miss-attunement by a service provider contributes to avoidance and activation of early negative attachment experiences. It is fundamentally important, that relationships be established, and that attempts to understand experiences are at the forefront of treatment.

### **Limitations**

Given that this was an exploratory study in nature, there are several limitations that must be considered. With any study that involves qualitative data, researcher bias must be acknowledged along with the subjectivity of the interview questions and the exploration of responses. The basis for the study was conceptualized by the author's personal life, therefore there is a potential for leading the interviewee with follow up questions in order to obtain the desired response. Additionally, certain themes might seem more relevant to the researcher than the independent coders, which might lead to inconsistent findings among themes. There is also the potential for inconsistent exploration of responses by the researcher as a result of the variable rapport established with all participants. To reduce these limitations, the researcher acknowledges his biases and hypotheses and utilized more than one coder and an auditor. Findings were compared to the relevant literature. Generalizability of the quantitative results is limited due to a relatively low response rate. Due to the sample size and nature of some measures only descriptive statistics and a correlation were conducted. There were several reasons identified for the low response rate. First, reaching out to veteran populations can be difficult unless one is closely affiliated with them. Also, veterans are reluctant to share about war-time

experiences and less likely to share their narratives to unknown individuals. The study also included an interview portion, which likely led to some refusing to participate. Several barriers were also encountered during the recruitment phase. Clinical supervisors at the VA did not allow for recruitment at their hospitals unless it was a VA funded study. Another agency did not allow for recruitment after noting that their veteran population did not meet criteria. Other barriers encountered included, some veterans not meeting initial criteria, while others expressed reluctance to talk about combat experiences and their PTSD. Another limitation was that the study only focused on recruiting in Los Angeles and neighboring counties due to the administration of face to face interviews and measures, thus limiting participant pool, and availability. As such, soldier experiences from one geographic area may differ from soldiers from other locations. Also, females were not included in this study due to their limited role in combat; however, females in the military are at high risk for developing PTSD due to sexual trauma, deployment, and occupational trauma (White et al., 2010).

Given the exploratory nature of the study and several limitations identified, the following areas for future research are discussed. Returning male and female veterans have likely been affected by their experiences in combat environments. Research has focused on how these experiences impact emotional well-being, yet few recognize who the veteran was pre-deployment. Future studies among second generation male and female veterans should explore this domain, as well as what effects early childhood experiences positive or negative with caregivers impact their current parenting styles and relationship quality. Participants in this study were all male, and five of six self-identified as White/Caucasian. These individuals were primarily recruited from local universities, thus it is important to note the educational opportunities that exist among different ethnic backgrounds. An area for future research can

explore post-war education seeking, degree attainment and utilization of Government Issue (GI) bill among ethnically diverse veterans.

Despite similarities in findings with previous research in relation to attachment, future studies should not only focus on attachment style among combat veterans, but also the remaining dyad that exist among primary caregiver and child in terms of adjustment and coping.

Exploration of coping resources after divorce or separation, as well as personal narratives can provide insight into how these individuals were able to cope with multiple stressors. Another area of exploration that this study did not examine was the impact a father's deployment has on a young child, age at time of deployment, cognitive functioning, school performance, and remaining caregivers stress levels. Also, this study identified the six participants as having a determined attachment after returning from combat, thus, it would be beneficial for future studies to explore attachment styles among war veterans pre-deployment. A comparison of pre and post combat attachment style would help understand the coping mechanisms involved during exposure to traumatic events, identify how veterans deal with trauma differently, and provide guidance in developing interventions to reduce severe responses to traumatic events.

Additionally, future studies can explore attachment patterns, resilience, and combat exposure. It is unclear what differences existed in regards to combat exposure among the veterans in this study.

In regards to substance use, these findings are consistent with previous literature on combat veterans and substance use rates; however, given the sample size, more research is needed to determine substance use pre-deployment, and what other factors are contributing to substance use. For instance, some veterans noted an increase in alcohol use post-war, while others began prior to their deployment. Lastly, this study employed a self-report screening

measure, future studies utilizing addiction scales or abuse measures with larger samples can make a more appropriate determination in regards to severity.

Further exploration of PTGI in individuals with insecure attachment as well as social support systems would help understand how these individuals utilize relationships to cope with stress as well as what other factors lead to forming bonds with others.

## **Conclusion**

Despite the limitations, this study is among the first to explore the role of attachment as a protective factor for PTSD among second generation combat veterans. This study highlighted the importance of having a secure attachment and its buffering effect on traumatic experiences. Findings supported previous research that identified improved psychological well-being among war veteran with a secure attachment compared with individuals with insecure attachment styles. Studies have done a diligent exploration of risk factors prior to combat; however, very few focus on the ecology of emotion regulation and factors that determine how one will deal with stressful environments. Given the low response rate and number of participants, future research should explore these findings in larger more representative sample. Also, there was an emphasis on the father and the role he played in the soldiers' upbringing, with no focus on the remaining mother-son dyad. Studies have looked at the effects of Vietnam veterans and family system, but what is often forgotten to explore is how this impacts a mother's ability to care for her children, along with her own attachment history. Moreover, further exploration of how divorce or separation affected veterans as children could highlight early behavioral, educational, and social problems that can impact interpersonal skills, and response to threat. One veteran shared that his father was divorced several times, and thus unable to establish an attachment with multiple step-mothers, leading to behavioral issues. Another factor that this study looked at was the role of

early father narratives of combat experiences and how these, if any, provided a buffering effect. Dekel & Goldblatt (2008) note that too much or no communication regarding combat narratives can have detrimental effects and serve as a path to indirect intergenerational transmission of trauma. Due to the poor relational and communication patterns that existed among participants and their fathers, there was no reported effect on emotional well-being or preparation for combat. Generally, all the participants expressed that “there is no preparing for combat” despite what someone tells you. Growing up, I listened to a lot of my father’s narratives when he served in Vietnam. In contrast to the participants, I felt that his narratives gave me a sense of what to expect, in regards to death, and loss.

My study also aimed to identify protective factors that contribute to an increased ability to overcome negative experiences. I was able to explore several domains within this area. For most of the participants, joining the military was a way to escape early social environments characterized by un-nurturing caregivers. While in the military, many formed deep bonds and connections with others that have ended due to military separation or death, resulting in a sense of loss. Despite being exposed to traumatic events, such as loss, abandonment, death, and combat, all alluded to social supports and acknowledged relating to others as an important component of their emotional well-being. In addition, many identified children, siblings, and partners as a reason to live and fulfill personal goals, and attributed these relationships as a means to cope during difficult times. In summary, in order to reduce the prevalence of PTSD among war veterans, it is not only important to identify potentially traumatic events, but an individual’s early attachment experiences to predict how one will likely react when faced with threat and interact with others. Furthermore, reducing the effects of early relational trauma by increasing connectedness among veterans will likely benefit all those involved in the treatment

of returning war veterans. This is evidenced by the identification of social supports as a protective factor, as well as high scores on relating to others on the post-traumatic growth inventory. Clinical interventions designed to facilitate personal strength, meaning, and appreciation of life can benefit veterans who are struggling with trauma. Focusing on providing relational reimbursements, and taking the time to understand veteran experiences before utilizing therapeutic techniques can lead to change, stimulate meaning making an purpose, and improve affect regulation abilities.



## References

- Agaibi, C. E., Wilson, J. P. (2005). Trauma, PTSD, and resilience: A review of the literature. *Trauma, Violence and Abuse*, 6(3):195-216. doi: 10.1177/1
- Ahmadzadeh, G. & Malekian, A. (2004). Aggression, anxiety, and social development in adolescent children of war veterans with PTSD versus those of non-veterans. *Journal of Research in Medical Sciences*, 5, 231-234.
- Ainsworth, M. D. S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, N.J: Lawrence Erlbaum Associates.
- Allen, J. G., & American Psychiatric Association. (2013). *Restoring mentalizing in attachment relationships: Treating trauma with plain old therapy*. Arlington, VA: American Psychiatric Publication., Inc.
- Banyard, V. L. (1997). The impact of childhood sexual abuse and family functioning on four Dimensions of women's later parenting. *Child Abuse and Neglect*, 21, 1095-1107.
- Banyard, V. L. Williams, L. M., & Siegel, J. A. (2003). The impact of complex trauma and depression on parenting: An exploration of mediating risk and protective factors. *Child Maltreatment*, 8, 334-349.
- Barel, E., Van IJzendoorn, M. H., Sagi-Schwartz, A. & Bakermans-Kranenburg, M. (2010). Surviving the holocaust: a meta-analysis of the long-term sequelae of a genocide. *Psychological Bulletin*, 136(5), 677-698.
- Beals, J., Manson, S. M., Shore, J. H., Friedman, M., Ashcraft, M., Fairbank, J. A., & Schlenger, W. E. (2002). The prevalence of posttraumatic stress disorder among American Indian Vietnam veterans: disparities and context. *Journal Of Traumatic Stress*, 15(2), 89.
- Beckham, J.C., Braxton, L. E., Kudler, H. S., Feldman, M. E., Lytle, B. L., & Palmer, S. (1997) Minnesota Multiphasic Personality Inventory profiles of Vietnam combat veterans with posttraumatic stress disorder and their children. *Journal of Clinical Psychology*, 53, 847-852
- Benetato, B. B. (2011). Posttraumatic growth among operation enduring freedom and operation Iraqi freedom amputees. *Journal of Nursing Scholarship*, 43(4), 412-420.
- Berz, J. B., Taft, C. T., Watkins, L. E., & Monson, C. M. (2008). Associations between PTSD symptoms and parenting satisfaction in a female veteran sample. *Journal of Psychological Trauma*, 7(1), 37-45.
- Bickman, L., & Rog, D. J. (2009). *The SAGE handbook of applied social research methods*. Los Angeles, CA: SAGE.

- Bolton, E. E., Litz, B. T., Britt, T. W., Adler, A., & Roemer, L. (2001). Reports of prior exposure to potentially traumatic events and PTSD in troops poised for deployment. *Journal of Traumatic Stress, 14*(1), 249-256.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist, 59*(1), 20-28.
- Bowlby, J. (1982). *Attachment and loss: Vol. 1: Attachment*. 2<sup>nd</sup> Edition. New York. Basic Books.
- Braga, L. L., Mello, M. F. & Fiks, J. P. (2012). Transgenerational transmission of trauma and resilience: A qualitative study with Brazilian offspring of Holocaust survivors. *BMC Psychiatry, 12*:134.
- Brave Heart, M. H., Chase, J., Elkins, J., Alchul, D. B. (2011). Historical trauma among Indigenous Peoples of the Americas: Concepts, research, and clinical considerations. *Journal of Psychoactive Drugs, 43*(4), 282-290. doi.10.1080/02791072.2011.628913
- Brodaty, H., Joffe, C., Luscombe, G., & Thompson, C. (2004). Vulnerability to post-traumatic stress disorder and psychological morbidity in aged Holocaust survivors. *International Journal of Geriatric Psychiatry, 19*, 968-979.
- Carlson, E. B., Smith, S. R., Palmieri, P. A., Dalenberg, C., Ruzek, J. I., Kimerling, R., Burling, T. A., & Spain, D. A.(2011). Trauma History Screen [Database record]. Retrieved from PsycTESTS. doi: 10.1037/t03738-000
- Caselli, L. T., & Motta, R. W. (1995). The effect of PTSD and combat level on Vietnam veterans' perceptions of child behavior and marital adjustment. *Journal of Clinical Psychology, 51*(1), 4-12.
- Centers for Disease Control and Prevention. (2013). Centers for Disease Control and Prevention: Division of Adolescent and School Health. Retrieved from <http://www.cdc.gov/healthy>.
- Cohen, L., Hien, D., & Batchelder, S. (2008). The impact of cumulative maternal trauma and diagnosis on parenting behavior. *Child Maltreatment, 13*(1), 27-38.
- Cohen, E., Zerach, G., & Solomon, Zahava. (2011). The implication of combat-induced stress reaction, PTSD, and attachment in parenting among war veterans. *Journal of Family Psychology, 25*(5), 688-698. doi: 10/1037/a0024065
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 54*, 644-663.

- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Harding, A., Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, *127*(1): 87-127. doi: 10.1037/0033-2909127.1.187
- Currier, J. M., Holland, J. M., & Allen, D. (2012). Attachment and mental health symptoms among U.S. Afghanistan and Iraq veterans seeking health care services. *Journal of Traumatic Stress*, *25*(6), 633-40.
- Danieli, Y. (1998). International handbook of multigenerational legacies of trauma. New York: Plenum Press.
- Davidson, A. C., & Mellor, D. J. (2000). The adjustment of children of Australian Vietnam veterans is there evidence for the transgenerational transmission of the effects of war related trauma? *Australian and New Zealand Journal of Psychiatry*, *35*, 345-351.
- Dekel, R., Solomon, Z., Ginzburg, K., & Neria, Y. (2004). Long-term adjustment among Israeli war veterans: The role of attachment style. *Anxiety, Stress & Coping*, *17*(2), 141-152.
- Dekel, R., & Goldblatt, H. (2008). Is there intergenerational transmission of trauma? The case of combat veterans' children. *American Journal of Orthopsychiatry*, *78*, 281-289.
- Derogatis, L.R. (1983). SCL-90 : Administration, Scoring and Procedures Manual-I for the Revised Version and other Instruments of the Psychopathology Rating Scale Series. Baltimore, MD: Johns Hopkins University School of Medicine, Clinical Psychometrics Research Unit.
- Elder, G. H., & Clipp, E. C. (1989). Combat experience and emotional health: Impairment and resilience in later life. *Journal of Personality*, *57*(2), 311-341.
- Figley, C. R. (1995). Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized. New York: Brunner/Mazel.
- Felsen, I. (1998). Transgenerational transmission of effects of the holocaust: The North American research perspective. In Y. Danieli (Ed.), International handbook of multigenerational legacies of trauma (pp. 43-69). New York: Plenum Press.
- Fontana, A., & Rosenheck, R. (2008). Treatment-seeking veterans of Iraq and Afghanistan. *The Journal of Nervous and Mental Disease*, *196*(7), 513-521.
- Fridman, A., Bakermans-Kranenburg, M. J., Sagi-Schwartz, A., & Van IJzendoorn, M. H. (2011). Coping in old age with extreme childhood trauma: Aging Holocaust survivors and their offspring facing new challenges. *Aging & Mental Health*, *15*(2), 232-42. doi:10.1080/13607863.2010.505232

- Garnezy, N. (1991) Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavior Scientist*, 34(4), 416-430.
- Gaylord-Harden, N. K., Gipson, P., Mance, G., Grant, K. E. (2008) Coping patterns of African American adolescents: A confirmatory factor analysis and cluster analysis of the children's coping strategies checklist. *Psychological Assessment*, 20(1), 10-22. doi: 10.1037/1040-3590.20.1.10
- Ghafoori, B., Hierzolzer, R., Howsepian, B. & Boardman, A. (2008). The role of adult attachment, parental bonding, and spiritual love in the adjustment to military trauma. *Journal of Trauma and Dissociation*, 9(1), 85-106, doi:10.1080/1529973802073726
- Giladi, L. & Bell, T. S. (2013). Protective factors for intergenerational transmission of trauma among second and third generation Holocaust survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(4), 384-391.
- Goldenberg, I., Matheson, K. (2005) Inner representations, coping, and post-traumatic stress symptomatology in a community sample of trauma survivors. *Basic and Applied Social Psychology*, 27(4), 361-369.
- Green, B. L., Grace, M. C., Lindy, J. D., Gleser, G. C., & Leonard, A. (1990). Risk factors for PTSD and other diagnoses in a general sample of Vietnam veterans. *The American Journal of Psychiatry*, 147(6), 729-33.
- Haley, S. (1985). Some of my best friends are dead: Treatment of the PTSD patient and his family. W.E., Kelley (Ed.) *Posttraumatic stress disorder and the war veteran patient* (pp. 54-71). New York: Brunner/Mazel.
- Harkness, L. L. (1993). Transgenerational transmission of war-related trauma. In J. P. Wilson & B. Raphael (Eds.), *International handbook of traumatic stress syndromes* (pp. 635-643). New York: Plenum Press.
- Hass A. (1990). *In the shadow of the Holocaust: the second generation*. Ithaca: Cornell University Press.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524.
- Hooper, L. M., Stockton, P., Krupnick, J. L. & Green, B. L. (2011). Development, use, and psychometric properties of the Trauma History Questionnaire. *Journal of Loss & Trauma*, 16(3), 258-283. doi: 10.1080/15325024.2011.572035
- Humeniuk, R., Ali, R., Babor, T.F., Farrell, M., Formigoni, M. L., Jittiwutikarn, J., & Simon, S. (2008). Validation of the alcohol, smoking and substance involvement screening test (ASSIST). *Addiction*, 103(6), 1039-1047.

- Irion, J. C., & Blanchard-Fields, F. (1987). A cross-sectional comparison of adaptive coping in adulthood. *Journal Of Gerontology*, 42(5), 502-504.
- Kaitz, M., Levy, M., Ebstein, R., Faraone, S. V. & Mankuta, D. (2009). The intergenerational effects of trauma from terror: A real possibility. *Infant Mental Health Journal*, 30(2), 158-179
- Lalonde, F., Nadeau, L. (2012) Risk and protective factors for comorbid posttraumatic stress disorder among homeless individuals in treatment for substance related problems. *Journal of Aggression, Maltreatment & Trauma*, 21(6), 626-645, doi: 10.1080/10926771.2012.694401
- Lazarus, R. S., Folkman, S. (1984) *Stress, appraisal, and coping*. New York: Springer
- Leon, G. R., Butcher, J. N., Kleinman, M., Goldberg, A. & Almagor, M. (1981). Survivors of the Holocaust and their children: Current status and adjustment. *Journal of Personality and Social Psychology*, 41(3), 503-516.
- Lev-Wiesel, R. (2007). Intergenerational transmission of trauma across three generations: A preliminary study. *Qualitative Social Work*, 6(1), 75-94.
- Lichtman, H. (1984). Parental communication of Holocaust experiences and personality characteristics among second-generation survivors. *Journal of Clinical Psychology*, 40(4), 914-924.
- Morano, C. (2010) Resilience and coping with trauma: Does gender make a difference? *Journal of Human Behavior in the Social Environment*, 20(4), 553-568, doi: 10.1080/10911350903275358
- Motta, R., Joseph, J., Rose, R., Souzzi, J., & Leiderman, L. (1997). Secondary trauma: Assessing inter-generational transmission of war experiences with a modified stroop procedure. *Journal of Clinical Psychology*, 53(8), 895-903.
- Palgi, Y., Shrira, A., & Ben-Ezra, M. (2011). World assumptions and psychological functioning among ultraorthodox and secular Holocaust survivors. *Traumatology*, 17(1), 14-21.
- Palmer, C. (2008). A theory of risk and resilience factors in military families. *Military Psychology*, 20(3), 205-217.
- Pargament, K., Feuille, M., & Burdzy, D. (2011). The Brief RCOPE: current psychometric status of a short measure of religious coping. *Religions*, 2, 51-76.
- Parsons, J., Kehle, T. J., & Owen, S. V. (1990). Incidence of behavior problems among children of Vietnam veterans. *School Psychology International*, 11, 253-259.

- Pietrzak, R. H., Johnson, D. C., Goldstein, M. B., Malley, J. C., & Southwick, S. M. (2009). Psychological resilience and post deployment social support protect against traumatic stress and depressive symptoms in soldiers returning from Operations Enduring Freedom and Iraqi Freedom. *Depression and Anxiety, 26*(8), 745-751.
- Rosenheck, R., & Nathan, P. (1985). Secondary traumatization in children of Vietnam veterans. *Psychiatric Services, 36*(5), 538-539.
- Rosenheck, R., & Fontana, A. (1998a). Warrior fathers and warrior sons: Intergenerational aspects of trauma. In Y. Danieli (Ed.), *International handbook of multigenerational legacies of trauma* (pp. 225–242). New York: Plenum Press.
- Rosenheck, R., & Fontana, A. (1998b). Transgenerational effects of abusive violence on the children of Vietnam combat veterans. *Journal of Traumatic Stress, 11*, 731–741.
- Rowland-Klein, D. & Dunlop, R. (1997). The transmission of trauma across generations: identification with parental trauma in children of Holocaust survivors. *Australian and New Zealand Journal of Psychiatry, 31*, 358-369.
- Ruscio, A. M., Weathers, F. W., King, L. A., & King, D. W. (2002). Male war-zone veterans' perceived relationships with their children: the importance of emotional numbing. *Journal of Traumatic Stress, 15*(5), 351-357.
- Scheeringa, M.S., & Zeanah, C.H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress, 14*, 799–814.
- Schore, A. N. (2001). Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal, 22*, 7-66.
- Schore, A. N. (2001). The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal, 22*, 201-269.
- Schutt, R. K. (1996). *Investigating the social world: The process and practice of research*. Thousand Oaks, CA: Pine Forge Press.
- Shmotkin, D., Shrira, A., Goldberg, S. C., & Palgi, Y. (2011). Resilience and vulnerability among aging Holocaust survivors and their families: An intergenerational overview. *Journal of Intergenerational Relationships, 9*(1), 7-21.
- Seckl, J.R., & Holmes, M.C. (2007). Mechanisms of disease: Glucocorticoids, their placental metabolism and fetal “programming” of adult pathophysiology. *Nature Clinical Practice Endocrinology & Metabolism, 3*, 479–488.

- Sherman, M. D., Larsen, J., Straits-Troster, K., Erbes, C., & Tassej, J. (2015). Veteran-child communication about parental PTSD: A mixed methods pilot study. *Journal of Family Psychology : Jfp : Journal of the Division of Family Psychology of the American Psychological Association (division 43)*, 29(4), 595-603.
- Siegel, D. J. (2012). *The developing mind: How relationships and the brain interact to shape who we are*. New York: Guilford Press.
- Sigal, J. J. and Weinfeld, M. (1989) Trauma and rebirth: intergenerational effects of the Holocaust. New York: Praeger.
- Sofuoglu, M., Rosenheck, R., & Petrakis, I. (2014). Pharmacological treatment of comorbid PTSD and substance use disorder: recent progress. *Addictive Behaviors*, 39(2), 428-33.
- Sorscher, N., Cohen, L. J. (1997). Trauma in children of Holocaust survivors: Transgenerational effects. *American Journal of Orthopsychiatry*, 67, 493-500.
- Steinberg A. Holocaust survivors and their children: A review of the clinical literature. In: Marcus P. Rosenberg A. eds. Hcalini; Their wounds: Psychotherapy with Holocaust survivors and their families. New York: Praeger. 1989:23-48.
- Tedeschi, R. G., & Calhoun, L. G. (2004). TARGET ARTICLE: "Posttraumatic Growth: conceptual foundations and empirical evidence". *Psychological Inquiry*, 15(1), 1-18.
- Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, 9(3), 455-471.
- The Alcohol, Smoking and Substance Abuse Involvement Screening Test (ASSIST): Development, reliability and feasibility. (2002). *Addiction*, 97(9), 1183.
- Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work*, 38(2), 218-235.
- Ungar, M. (2011). The social ecology of resilience. Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry*, 81, 1-17.
- Ungar, M., & Liebenberg, L. (2011) Assessing resilience across cultures using mixed methods: Construction of the child and youth resilience measure. *Journal of Mixed Methods Research*, 5(126): doi: 10.1177/1558689811400607
- Van, . K. B. A. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York: Penguin Books.
- Van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Sagi-Schwartz, A. (2003). Are children of Holocaust survivors less well-adapted? A meta-analytic investigation of secondary traumatization. *Journal of Traumatic Stress*, 16, 459-469.

- Weisz, J.R., McCabe, M.A., & Denning, M.D. (1994). Primary and secondary control among children undergoing medical procedures: Adjustment as a function of coping style. *Journal of Consulting and Clinical Psychology, 62*(2), 324.
- Westerink, J., & Gerratano, L. (1999). The impact of post-traumatic stress disorder on partners and children of Australian Vietnam veterans. *Australian and New Zealand Journal of Psychiatry, 33*, 841-847.
- White, D. L., Savas, L. S., Daci, K., Elserag, R., Graham, D. P., Fitzgerald, S. J., Smith, S. L., El-Serag, H. B. (2010). Trauma history and risk of the irritable bowel syndrome in women veterans. *Alimentary Pharmacology & Therapeutics, 32*(4), 551-61.
- Wiseman, H., Barber, J. P., Raz, A., Yam, I., Foltz, C., & Snir, S. (2002). Parental communication of Holocaust experiences and interpersonal patterns of offspring of Holocaust survivors. *International Journal of Behavioral Development, 26*, 371–381.
- Wiseman, H., Metzl, E. & Barber, J. P. (2006). Anger, guilt, and intergenerational communication of trauma in the interpersonal narratives of second generation Holocaust survivors. *American Journal of Orthopsychiatry, 76*(2), 176-184.
- Wood, M., & Britt, T. (2011). Buffering effects of benefit finding in a war environment. *Military Psychology, 23*, 202-219, doi: 10.1080/08995605.2010.521732
- Yehuda, R., Flory, J. (2007) Differentiating biological correlates of risk, PTSD, and resilience following trauma exposure. *Journal of Traumatic Stress, 20*(4): 435-447.
- Yehuda R., Halligan S. L., Grossman R. (2001). Childhood trauma and risk for PTSD: Relationship to intergenerational effects of trauma, parental PTSD, and cortisol excretion. *Development and Psychopathology, 13*(3), 733-753.
- Yehuda, R., Schmeidler, J., Wainberg, M., Binder-Brynes, K., & Duvdevani, T. (1998). Vulnerability to posttraumatic stress disorder in adult offspring of Holocaust survivors. *American Journal of Psychiatry, 155*, 1163–1171.
- Zohar, A., Giladi, L., & Givati, T. (2007) Holocaust exposure and disordered eating : A study of multi-generational transmission. *European Eating Disorders Review, 15*, 50-57.



## APPENDIX A

## Notice of Approval for Human Research



Pepperdine University  
24255 Pacific Coast Highway  
Malibu, CA 90263  
TEL: 310-506-4000

## NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: July 25, 2016

Protocol Investigator Name: Carlos Perez

Protocol #: 16-03-239

Project Title: Protective Factors for Post-Traumatic Stress Disorder among Second Generation Combat Veterans

School: Graduate School of Education and Psychology

Dear Carlos Perez:

Thank you for submitting your application for expedited review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. As the nature of the research met the requirements for expedited review under provision Title 45 CFR 46.110 of the federal Protection of Human Subjects Act, the IRB conducted a formal, but expedited, review of your application materials.

Based upon review, your IRB application has been approved. The IRB approval begins today July 25, 2016, and expires on July 24, 2017.

Your final consent form has been stamped by the IRB to indicate the expiration date of study approval. You can only use copies of the consent that have been stamped with the IRB expiration date to obtain consent from your participants.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Please be aware that changes to your protocol may prevent the research from qualifying for expedited review and will require a submission of a new IRB application or other materials to the IRB. If contact with subjects will extend beyond July 24, 2017, a continuing review must be submitted at least one month prior to the expiration date of study approval to avoid a lapse in approval.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at [community.pepperdine.edu/irb](http://community.pepperdine.edu/irb).

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,



Pepperdine University  
24255 Pacific Coast Highway  
Malibu, CA 90263  
TEL: 310-506-4000

Judy Ho, Ph.D., IRB Chairperson

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives

Mr. Brett Leach, Regulatory Affairs Specialist

## APPENDIX B

## Referrals to Mental Health Providers in the Area

**Pepperdine Community Counseling Center**

West Los Angeles  
6100 Center Drive  
Los Angeles, CA 90045  
(310) 568-5752

Encino  
16830 Ventura Blvd, Suite 216  
Encino, CA 91436  
(818) 501-1678

Irvine  
18111 Von Karman Avenue, Suite 401  
Irvine, CA 92612  
(949) 223-2570

**Hollywood Sunset Free Clinic**

3324 Sunset Blvd,  
Los Angeles, CA 90026  
(323) 660-2400

**Edelman Westside Mental Health**

11080 W Olympic Blvd,  
Los Angeles, CA 90064  
(310) 966-6500

## APPENDIX C

## Recruitment Flyer

Are you the son of a military veteran (Vietnam War, WWII, Gulf War) and have also been deployed to the Middle East in support of Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF)?

If so, you might be eligible to participate in the following study:

**Protective Factors for Post-Traumatic Stress Disorder among Second Generation Combat Veterans**

**Purpose:** This study aims to identify protective factors among Warrior sons of Combat veterans.

**Compensation:** Receive a \$25 gift card for your participation in a brief phone survey and one-hour interview.

**Confidentiality:** All information provided is strictly confidential and for research purposes only.

**If you are interested in participating in this study and meet the additional criteria:**

- Awarded the Combat Action Badge or Ribbon
- Age 18-45

**Please contact:**

**SSG Carlos J. Perez @ [REDACTED] or email: [carlos.perez@pepperdine.edu](mailto:carlos.perez@pepperdine.edu)**

**Thank You,  
Carlos J. Perez, M.A.  
Doctoral Student, Pepperdine University  
Graduate School of Education and Psychology**

## APPENDIX D

## Demographic Information

Name: \_\_\_\_\_

Age: \_\_\_\_\_

Gender: \_\_\_\_\_

Race: \_\_\_\_\_

Ethnicity: \_\_\_\_\_

Educational Level: \_\_\_\_\_

Years of Military Service: \_\_\_\_\_

Rank: \_\_\_\_\_

# of Deployments: \_\_\_\_\_

OEF/OIF: \_\_\_\_\_

Marital Status: \_\_\_\_\_

## APPENDIX E

## Qualitative Interview Questions

1. How much do you know about your father's combat experience? How did you find out? How old were you?
2. How do you believe your father's combat experience affected the way you were parented as a child? How did it affect your relationship with him or other caregivers?
3. What do you remember most about your father?
4. Are there any difference between your father's combat experience and yours? If so, what were the differences?
5. Describe how you prepared for your deployment? Was there any communication with your father about your deployment?
6. What messages did you receive from your father as it relates to deployment? Combat? Joining the military?
7. Did knowing about your father's combat experience prepare you for your deployment? Was it helpful?
8. What is your perception of your father's combat experience and its effect on you emotionally? Psychologically?
9. What were your reasons for joining the military? Was there any influence?
10. How old were you when you deployed to the Middle East?
11. How was your combat experience? How long were you deployed?
12. How do you feel about war?
13. What do you think helped you deal with your combat experience? In comparison to fellow soldiers?

14. If necessary, would you return to the Middle East? If yes, what are the reasons? If no, what are the reasons?
15. Have there been other events or experiences that might have prepared you for combat?
16. Have you any particular strengths that you attribute to your father's combat experience?
17. Is there any additional information you would like to share related to the topics we have been exploring?

## APPENDIX F

## A. WHO - ASSIST V3.0

ID# \_\_\_\_\_

DATE \_\_\_\_\_

## INTRODUCTION (Please read to patient )

Thank you for agreeing to take part in this brief interview about alcohol, tobacco products and other drugs. I am going to ask you some questions about your experience of using these substances across your lifetime and in the past three months. These substances can be smoked, swallowed, snorted, inhaled, injected or taken in the form of pills (show drug card).

Some of the substances listed may be prescribed by a doctor (like amphetamines, sedatives, pain medications). For this interview, we will not record medications that are used as prescribed by your doctor. However, if you have taken such medications for reasons other than prescription, or taken them more frequently or at higher doses than prescribed, please let me know. While we are also interested in knowing about your use of various illicit drugs, please be assured that information on such use will be treated as strictly confidential.

NOTE: BEFORE ASKING QUESTIONS, GIVE ASSIST RESPONSE CARD TO PATIENT

## Question 1

(if completing follow-up please cross check the patient's answers with the answers given for Q1 at baseline. Any differences on this question should be queried)

| In your life, which of the following substances have you <u>ever used</u> ? (NON-MEDICAL USE ONLY) | No | Yes |
|--|----|-----|
| a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)                                    | 0  | 3   |
| b. Alcoholic beverages (beer, wine, spirits, etc.)   | 0  | 3   |
| c. Cannabis (marijuana, pot, grass, hash, etc.)  | 0  | 3   |
| d. Cocaine (coke, crack, etc.)   | 0  | 3   |
| e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)                                  | 0  | 3   |
| f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)  | 0  | 3   |
| g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)                                   | 0  | 3   |
| h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)                                      | 0  | 3   |
| i. Opioids (heroin, morphine, methadone, codeine, etc.)  | 0  | 3   |
| j. Other - specify:  | 0  | 3   |

Probe if all answers are negative:  
"Not even when you were in school?"

If "No" to all items, stop interview.

If "Yes" to any of these items, ask Question 2 for each substance ever used.



## Question 2

| In the <u>past three months</u> , how often have you used the substances you mentioned (FIRST DRUG, SECOND DRUG, ETC)? | Never | Once or Twice | Monthly | Weekly | Daily or Almost Daily |
|--|-------|---------------|---------|--------|-----------------------|
| a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)  | 0     | 2             | 3       | 4      | 6                     |
| b. Alcoholic beverages (beer, wine, spirits, etc.)   | 0     | 2             | 3       | 4      | 6                     |
| c. Cannabis (marijuana, pot, grass, hash, etc.)  | 0     | 2             | 3       | 4      | 6                     |
| d. Cocaine (coke, crack, etc.)   | 0     | 2             | 3       | 4      | 6                     |
| e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)  | 0     | 2             | 3       | 4      | 6                     |
| f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)  | 0     | 2             | 3       | 4      | 6                     |
| g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)   | 0     | 2             | 3       | 4      | 6                     |
| h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)  | 0     | 2             | 3       | 4      | 6                     |
| i. Opioids (heroin, morphine, methadone, codeine, etc.)  | 0     | 2             | 3       | 4      | 6                     |
| j. Other - specify:  | 0     | 2             | 3       | 4      | 6                     |

If "Never" to all items in Question 2, skip to Question 6.

If any substances in Question 2 were used in the previous three months, continue with Questions 3, 4 & 5 for each substance used.

## Question 3

| During the <u>past three months</u> , how often have you had a strong desire or urge to use (FIRST DRUG, SECOND DRUG, ETC)? | Never | Once or Twice | Monthly | Weekly | Daily or Almost Daily |
|---|-------|---------------|---------|--------|-----------------------|
| a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)   | 0     | 3             | 4       | 5      | 6                     |
| b. Alcoholic beverages (beer, wine, spirits, etc.)  | 0     | 3             | 4       | 5      | 6                     |
| c. Cannabis (marijuana, pot, grass, hash, etc.)   | 0     | 3             | 4       | 5      | 6                     |
| d. Cocaine (coke, crack, etc.)  | 0     | 3             | 4       | 5      | 6                     |
| e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)   | 0     | 3             | 4       | 5      | 6                     |
| f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)   | 0     | 3             | 4       | 5      | 6                     |
| g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)  | 0     | 3             | 4       | 5      | 6                     |
| h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)   | 0     | 3             | 4       | 5      | 6                     |
| i. Opioids (heroin, morphine, methadone, codeine, etc.)   | 0     | 3             | 4       | 5      | 6                     |
| j. Other - specify:   | 0     | 3             | 4       | 5      | 6                     |

| During the <u>past three months</u> , how often has your use of (FIRST DRUG, SECOND DRUG, ETC) led to health, social, legal or financial problems? | Never | Once or Twice | Monthly | Weekly | Daily or Almost Daily |
|--|-------|---------------|---------|--------|-----------------------|
| a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)  | 0     | 4             | 5       | 6      | 7                     |
| b. Alcoholic beverages (beer, wine, spirits, etc.)   | 0     | 4             | 5       | 6      | 7                     |
| c. Cannabis (marijuana, pot, grass, hash, etc.)  | 0     | 4             | 5       | 6      | 7                     |
| d. Cocaine (coke, crack, etc.)   | 0     | 4             | 5       | 6      | 7                     |
| e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)  | 0     | 4             | 5       | 6      | 7                     |
| f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)  | 0     | 4             | 5       | 6      | 7                     |
| g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)   | 0     | 4             | 5       | 6      | 7                     |
| h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)  | 0     | 4             | 5       | 6      | 7                     |
| i. Opioids (heroin, morphine, methadone, codeine, etc.)  | 0     | 4             | 5       | 6      | 7                     |
| j. Other - specify:  | 0     | 4             | 5       | 6      | 7                     |

## Question 5

| During the <u>past three months</u> , how often have you failed to do what was normally expected of you because of your use of (FIRST DRUG, SECOND DRUG, ETC)? | Never | Once or Twice | Monthly | Weekly | Daily or Almost Daily |
|--|-------|---------------|---------|--------|-----------------------|
| a. Tobacco products  |       |               |         |        |                       |
| b. Alcoholic beverages (beer, wine, spirits, etc.)   | 0     | 5             | 6       | 7      | 8                     |
| c. Cannabis (marijuana, pot, grass, hash, etc.)  | 0     | 5             | 6       | 7      | 8                     |
| d. Cocaine (coke, crack, etc.)   | 0     | 5             | 6       | 7      | 8                     |
| e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)  | 0     | 5             | 6       | 7      | 8                     |
| f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)  | 0     | 5             | 6       | 7      | 8                     |
| g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)   | 0     | 5             | 6       | 7      | 8                     |
| h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)  | 0     | 5             | 6       | 7      | 8                     |
| i. Opioids (heroin, morphine, methadone, codeine, etc.)  | 0     | 5             | 6       | 7      | 8                     |
| j. Other - specify:  | 0     | 5             | 6       | 7      | 8                     |

## Question 6

| Has a friend or relative or anyone else <u>ever</u> expressed concern about your use of (FIRST DRUG, SECOND DRUG, ETC.)? | No, Never | Yes, in the past 3 months | Yes, but not in the past 3 months |
|--|-----------|---------------------------|-----------------------------------|
| a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)  | 0         | 6                         | 3                                 |
| b. Alcoholic beverages (beer, wine, spirits, etc.)   | 0         | 6                         | 3                                 |
| c. Cannabis (marijuana, pot, grass, hash, etc.)  | 0         | 6                         | 3                                 |
| d. Cocaine (coke, crack, etc.)   | 0         | 6                         | 3                                 |
| e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)  | 0         | 6                         | 3                                 |
| f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)  | 0         | 6                         | 3                                 |
| g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)   | 0         | 6                         | 3                                 |
| h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)  | 0         | 6                         | 3                                 |
| i. Opioids (heroin, morphine, methadone, codeine, etc.)  | 0         | 6                         | 3                                 |
| j. Other – specify:  | 0         | 6                         | 3                                 |

## Question 7

| Have you <u>ever</u> tried and failed to control, cut down or stop using (FIRST DRUG, SECOND DRUG, ETC.)? | No, Never | Yes, in the past 3 months | Yes, but not in the past 3 months |
|---|-----------|---------------------------|-----------------------------------|
| a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)   | 0         | 6                         | 3                                 |
| b. Alcoholic beverages (beer, wine, spirits, etc.)  | 0         | 6                         | 3                                 |
| c. Cannabis (marijuana, pot, grass, hash, etc.)   | 0         | 6                         | 3                                 |
| d. Cocaine (coke, crack, etc.)  | 0         | 6                         | 3                                 |
| e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)   | 0         | 6                         | 3                                 |
| f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)   | 0         | 6                         | 3                                 |
| g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)  | 0         | 6                         | 3                                 |
| h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)   | 0         | 6                         | 3                                 |
| i. Opioids (heroin, morphine, methadone, codeine, etc.)   | 0         | 6                         | 3                                 |
| j. Other – specify:   | 0         | 6                         | 3                                 |

## APPENDIX G

## TRAUMA HISTORY QUESTIONNAIRE

The following is a series of questions about serious or traumatic life events. These types of events actually occur with some regularity, although we would like to believe they are rare, and they affect how people feel about, react to, and/or think about things subsequently. Knowing about the occurrence of such events, and reactions to them, will help us to develop programs for prevention, education, and other services. The questionnaire is divided into questions covering crime experiences, general disaster and trauma questions, and questions about physical and sexual experiences.

For each event, please indicate (circle) whether it happened and, if it did, the number of times and your approximate age when it happened (give your best guess if you are not sure). Also note the nature of your relationship to the person involved and the specific nature of the event, if appropriate.

| <i>Crime-Related Events</i>        |   | Circle One |     | Number of times | Approximate age(s) |
|------------------------------------|---|------------|-----|-----------------|--------------------|
| 1                                  | Has anyone ever tried to take something directly from you by using force or the threat of force, such as a stick-up or mugging?   | No         | Yes |                 |                    |
| 2                                  | Has anyone ever attempted to rob you or actually robbed you (i.e., stolen your personal belongings)?  | No         | Yes |                 |                    |
| 3                                  | Has anyone ever attempted to or succeeded in breaking into your home when you were <u>not</u> there?  | No         | Yes |                 |                    |
| 4                                  | Has anyone ever attempted to or succeed in breaking into your home while you <u>were</u> there?   | No         | Yes |                 |                    |
| <i>General Disaster and Trauma</i> |   | Circle One |     | Number of times | Approximate age(s) |
| 5                                  | Have you ever had a serious accident at work, in a car, or somewhere else? ( <b>If yes</b> , please specify below)<br>_____   | No         | Yes |                 |                    |
| 6                                  | Have you ever experienced a natural disaster such as a tornado, hurricane, flood or major earthquake, etc., where you felt you or your loved ones were in danger of death or injury? ( <b>If yes</b> , please specify below)<br>_____ | No         | Yes |                 |                    |

|    |  |    |     |  |  |
|----|--|----|-----|--|--|
| 7  | <p>Have you ever experienced a “man-made” disaster such as a train crash, building collapse, bank robbery, fire, etc., where you felt you or your loved ones were in danger of death or injury? (<b>if yes</b>, please specify below)</p> <p>_____</p> | No | Yes |  |  |
| 8  | <p>Have you ever been exposed to dangerous chemicals or radioactivity that might threaten your health?</p>   | No | Yes |  |  |
| 9  | <p>Have you ever been in any other situation in which you were seriously injured? (<b>if yes</b>, please specify below)</p> <p>_____</p>   | No | Yes |  |  |
| 10 | <p>Have you ever been in any other situation in which you feared you <u>might</u> be killed or seriously injured? (<b>if yes</b>, please specify below)</p> <p>_____</p>   | No | Yes |  |  |
| 11 | <p>Have you ever seen someone seriously injured or killed? (<b>if yes</b>, please specify who below)</p> <p>_____</p>  | No | Yes |  |  |
| 12 | <p>Have you ever seen dead bodies (other than at a funeral) or had to handle dead bodies for any reason? (<b>if yes</b>, please specify below)</p> <p>_____</p>  | No | Yes |  |  |
| 13 | <p>Have you ever had a close friend or family member murdered, or killed by a drunk driver? (<b>if yes</b>, please specify relationship [e.g., mother, grandson, etc.] below)</p> <p>_____</p>   | No | Yes |  |  |
| 14 | <p>Have you ever had a spouse, romantic partner, or child die? (<b>if yes</b>, please specify relationship below)</p> <p>_____</p>   | No | Yes |  |  |
| 15 | <p>Have you ever had a serious or life-threatening illness? (<b>if yes</b>, please specify below)</p> <p>_____</p>   | No | Yes |  |  |
| 16 | <p>Have you ever received news of a serious injury, life-threatening illness, or unexpected death of someone close to you? (<b>if yes</b>, please indicate below)</p> <p>_____</p>   | No | Yes |  |  |

|  |   |                   |     |                  |   |
|--|---|-------------------|-----|------------------|---|
| 17                                     | Have you ever had to engage in combat while in military service in an official or unofficial war zone? ( <b>If yes</b> , please indicate where below)<br>_____  | No                | Yes |                  |   |
| <b>Physical and Sexual Experiences</b> |   | <b>Circle One</b> |     | <b>Repeated?</b> | <b>Approximate age(s) and frequency</b> |
| 18                                     | Has anyone ever made you have intercourse or oral or anal sex against your will? ( <b>If yes</b> , please indicate nature of relationship with person [e.g., stranger, friend, relative, parent, sibling] below)<br>_____                     | No                | Yes |                  |   |
| 19                                     | Has anyone ever touched private parts of your body, or made you touch theirs, under force or threat? ( <b>If yes</b> , please indicate nature of relationship with person [e.g., stranger, friend, relative, parent, sibling] below)<br>_____ | No                | Yes |                  |   |
| 20                                     | Other than incidents mentioned in Questions 18 and 19, have there been any other situations in which another person tried to force you to have an unwanted sexual contact?  | No                | Yes |                  |   |
| 21                                     | Has anyone, including family members or friends, ever attacked you with a gun, knife, or some other weapon?   | No                | Yes |                  |   |
| 22                                     | Has anyone, including family members or friends, ever attacked you <u>without</u> a weapon and seriously injured you?   | No                | Yes |                  |   |
| 23                                     | Has anyone in your family ever beaten, spanked, or pushed you hard enough to cause injury?  | No                | Yes |                  |   |
| 24                                     | Have you experienced any other extraordinarily stressful situation or event that is not covered above? ( <b>If yes</b> , please specify below)<br>_____   | No                | Yes |                  |   |

## APPENDIX H

**Adult Attachment Scale (Collins & Read, 1990)**

Please read each of the following statements and rate the extent to which it describes your feelings about romantic relationships. Please think about all your relationships (past and present) and respond in terms of how you generally feel in these relationships. If you have never been involved in a romantic relationship, answer in terms of how you think you would feel.

Please use the scale below by placing a number between 1 and 5 in the space provided to the right of each statement.

- | 1-----2-----3-----4-----5 | Not at all<br>characteristic<br>of me  | Very<br>characteristic<br>of me |
|---------------------------|--|---------------------------------|
| (1)                       | I find it relatively easy to get close to others.                              | _____                           |
| (2)                       | I do <u>not</u> worry about being abandoned.                                   | _____                           |
| (3)                       | I find it difficult to allow myself to depend on others.                       | _____                           |
| (4)                       | In relationships, I often worry that my partner does not really love me.       | _____                           |
| (5)                       | I find that others are reluctant to get as close as I would like.              | _____                           |
| (6)                       | I am comfortable depending on others.  | _____                           |
| (7)                       | I do <u>not</u> worry about someone getting too close to me.                   | _____                           |
| (8)                       | I find that people are never there when you need them.                         | _____                           |
| (9)                       | I am somewhat uncomfortable being close to others.                             | _____                           |
| (10)                      | In relationships, I often worry that my partner will not want to stay with me. | _____                           |
| (11)                      | I want to merge completely with another person.                                | _____                           |
| (12)                      | My desire to merge sometimes scares people away.                               | _____                           |
| (13)                      | I am comfortable having others depend on me.                                   | _____                           |
| (14)                      | I know that people will be there when I need them.                             | _____                           |
| (15)                      | I am nervous when anyone gets too close.                                       | _____                           |
| (16)                      | I find it difficult to trust others completely.                                | _____                           |
| (17)                      | Often, partners want me to be closer than I feel comfortable being.            | _____                           |
| (18)                      | I am not sure that I can always depend on others to be there when I need them. | _____                           |

## APPENDIX I

post-traumatic growth inventory

Listed below are 21 areas that are sometimes reported to have changed after traumatic events. Please mark the appropriate box beside each description indicating how much you feel you have experienced change in the area described. The 0 to 5 scale is as follows:

0 = I did not experience this change as a result of my crisis

1 = I experienced this change to a very small degree

2 = a small degree

3 = a moderate degree

4 = a great degree

5 = a very great degree as a result of my crisis

|    | <b>possible areas of growth and change</b>                         | 0 | 1 | 2 | 3 | 4 | 5 |
|----|--|---|---|---|---|---|---|
| a. | my priorities about what is important in life                      |   |   |   |   |   |   |
| b. | an appreciation for the value of my own life                       |   |   |   |   |   |   |
| c. | I developed new interests  |   |   |   |   |   |   |
| d. | a feeling of self-reliance   |   |   |   |   |   |   |
| e. | a better understanding of spiritual matters                        |   |   |   |   |   |   |
| f. | knowing that I can count on people in times of trouble             |   |   |   |   |   |   |
| g. | I established a new path for my life                               |   |   |   |   |   |   |
| h. | a sense of closeness with others                                   |   |   |   |   |   |   |
| i. | a willingness to express my emotions                               |   |   |   |   |   |   |
| j. | knowing I can handle difficulties                                  |   |   |   |   |   |   |
| k. | I'm able to do better things with my life                          |   |   |   |   |   |   |
| l. | being able to accept the way things work out                       |   |   |   |   |   |   |
| m. | appreciating each day  |   |   |   |   |   |   |
| n. | new opportunities are available which wouldn't have been otherwise |   |   |   |   |   |   |
| o. | having compassion for others                                       |   |   |   |   |   |   |
| p. | putting effort into my relationships                               |   |   |   |   |   |   |
| q. | I'm more likely to try to change things which need changing        |   |   |   |   |   |   |
| r. | I have a stronger religious faith                                  |   |   |   |   |   |   |
| s. | I discovered that I am stronger than I thought I was               |   |   |   |   |   |   |
| t. | I learned a great deal about how wonderful people are              |   |   |   |   |   |   |
| u. | I accept needing others  |   |   |   |   |   |   |



Tedeschi RG & Calhoun LG The posttraumatic growth inventory: measuring the positive legacy of trauma Journal of Traumatic Stress 1996; 9: 455-471

## APPENDIX J

## Prescreening Script

## Prescreening Script

Thank you for your interest in our study.

I need to ask you a few questions in order to determine whether you may be eligible for the research. Before I begin, I would like to tell you a little about the research.

This research study is looking at the protective factors for Post-Traumatic Stress Disorder among Second Generation Combat Veterans. If you are eligible, your participation in this research will consist of one 2-hour interview session which will consist of several measures to fill out and a qualitative interview. At the conclusion of that session you will be given \$25.00 for your time and participation in the study.

The screening will take about 5 minutes. You may feel uncomfortable answering questions about your *personal life*. You do not have to answer any questions you do not wish to answer and you may stop at any time. Your participation in this screening is voluntary. A decision whether or not to participate in the screening will not affect your relationship with Pepperdine University. Would you like to continue with the screening to find out if you can take part in the study?

*If yes, continue with the screening.*

*If no, thank them for their time and hang up.*

Your answers will be confidential. No one will know the answers except for the research team. If you do not qualify for the study, your information will be destroyed. If you do qualify, your answers will be de-identified and your name will not be used on any published documents. Anything with your name on it will be kept in a locked cabinet to ensure your privacy.

Would you like to continue with the screening to find out if you qualify for the study?

*If yes, continue with the screening.*

*If no, thank them for their time and hang up.*

## Screening Questions:

- A. Are you between the age of 18 and 45? *If yes, continue with the screening. If no, thank them for their time and hang up.*
- B. Are you a combat veteran? *If yes, continue with the screening. If no, thank them for their time and hang up.*
- C. Did your father see combat in Vietnam, Korean War, Persian Gulf, or World War 2? *If yes, continue with screening. If no, thank them for their time and hang up.*
- D. Were you deployed to the Middle East in service of Operation Enduring Freedom (OEF) or Operation Iraqi Freedom (OIF)? *If yes, continue with screening. If no, thank them for their time and hang up.*

- E. Did you receive the combat action badge or ribbon during OEF or OIF? *If yes, continue with screening. If no, thank them for their time and hang up.*
- F. During your deployment to OEF or OIF, were you exposed to a stressful event during combat? *If yes, continue with screening. If no, thank them for their time and hang up.*
- G. Are you currently having thoughts of harming yourself or others? *If no, continue with the screening. If yes, thank them for their time, give them a list of referrals over the phone.*
- H. Have you ever or since returning from OEF or OIF, been diagnosed with Post-Traumatic Stress Disorder? *If no, continue with screening. If yes, thank them for their time and hang up.*

Thank you for answering the screening questions. *Indicate whether the person is eligible, or ineligible and explain why.*

Do you have any questions about the screening or the study? I am going to give you a couple of telephone numbers to call if you have questions later. If you have questions about how the investigators decide whether you can take part in the study, you may call me, again my name is Carlos Perez, and I will answer any other questions that you may have. My phone number is [REDACTED].