

8-2012

Family Members' Support Approaches Toward Veterans Exhibiting Symptoms of PTSD: A First Step Toward Validating The Inconsistent Nurturing as Control Theory Scale

Danielle M. Reed
University of Texas-Pan American

Follow this and additional works at: https://scholarworks.utrgv.edu/leg_etd



Part of the [Communication Commons](#)

Recommended Citation

Reed, Danielle M., "Family Members' Support Approaches Toward Veterans Exhibiting Symptoms of PTSD: A First Step Toward Validating The Inconsistent Nurturing as Control Theory Scale" (2012). *Theses and Dissertations - UTB/UTPA*. 568.

https://scholarworks.utrgv.edu/leg_etd/568

This Thesis is brought to you for free and open access by ScholarWorks @ UTRGV. It has been accepted for inclusion in Theses and Dissertations - UTB/UTPA by an authorized administrator of ScholarWorks @ UTRGV. For more information, please contact justin.white@utrgv.edu, william.flores01@utrgv.edu.

FAMILY MEMBERS' SUPPORT APPROACHES TOWARD VETERANS
EXHIBITING SYMPTOMS OF PTSD: A FIRST STEP TOWARD VALIDATING THE
INCONSISTENT NURTURING AS CONTROL THEORY SCALE

A Thesis

by

DANIELLE M. REED

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

MASTER OF ARTS

August 2012

Major Subject: Communication

FAMILY MEMBERS' SUPPORT APPROACHES TOWARD VETERANS
EXHIBITING SYMPTOMS OF PTSD: A FIRST STEP TOWARD VALIDATING THE
INCONSISTENT NURTURING AS CONTROL THEORY SCALE

A Thesis
by
DANIELLE M. REED

COMMITTEE MEMBERS

Dr. Dora E. Saavedra
Chair of Committee

Dr. Cory Cunningham
Committee Member

Dr. Jennifer Lemanski
Committee Member

August 2012

Copyright 2012 Danielle M. Reed
All Rights Reserved

ABSTRACT

Reed, Danielle M., Family Members' Support Approaches Toward Veterans Exhibiting Symptoms of PTSD: A First Step Toward Validating The Inconsistent Nurturing As Control Theory Scale. Master of Arts (M.A.), August, 2012, 53 pp., 4 tables, 3 figures, references, 32 titles.

This study was an initial step toward validating a new quantitative measure, the Inconsistent Nurturing as Control Theory (INCT) Scale, designed to quantitatively operationalize the INCT and assess whether functional family members take a controlling, nurturing, or inconsistent support approach to deal with their veteran's PTSD behavior. Functional family members (88%) indicated that their veteran relative exhibited signs indicative of PTSD, using the PTSD Checklist (PCL-M). The INCT Scale was then used to determine which support approach family members used to deal with their veteran's behavior. Results indicated that question items on nurturing and controlling yielded .70 or above internal reliability scores, thus supporting both hypotheses. The analysis regarding the validity of the INCT Scale was inconclusive due to the small sample size. Problems with the PCL-M instrument were also discussed. Initial findings, therefore, suggest that the INCT Scale is a promising instrument to reliably identify support approaches.

DEDICATION

The completion of my master's program would not have been possible without the support, encouragement, love, and guidance from family. Thank you to my mother, Elaine Reed, my father, Denton Reed, and Keith, for being there every step of the way. To my brother, Brandon Reed, thank you for inspiring me with the passion and courage you so selflessly served with.

ACKNOWLEDGMENTS

Special thanks to the members of my thesis committee: Dr. Cory Cunningham, Dr. Dora E. Saavedra, and Dr. Jennifer Lemanski for spending tireless hours designing and re-designing this study. Their support and enthusiasm for this study has taught me a great deal that I will continue to carry with me. They have tirelessly encouraged me to focus this research to ensure the quality of my work.

I would also like to thank my fellow classmates who helped support me through this process. I appreciate their dedication and guidance to the program and the field of communication.

TABLE OF CONTENTS

	Page
ABSTRACT.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENTS.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
CHAPTER I INTRODUCTION.....	1
CHAPTER II REVIEW OF LITERATURE.....	5
Posttraumatic Stress Disorder.....	5
Overview and History.....	5
PTSD in Veterans.....	6
Inconsistent Nurturing as Control Theory.....	10
Overview.....	10
Past INCT Qualitative Research Studies.....	13
Rationale for A New Quantitative Measure: The INCT Scale.....	14
Summary of Rationale.....	16
Research Questions and Hypotheses.....	17
CHAPTER III METHODOLOGY.....	18
Participants.....	18
Measures.....	19

Development of the INCT Scale.....	19
CHAPTER IV RESULTS AND DISCUSSION.....	22
Results.....	22
Discussion.....	30
REFERENCES.....	33
APPENDIX.....	36
BIOGRAPHICAL SKETCH.....	53

LIST OF TABLES

	Page
Table 1: Demographic Descriptive Statistics.....	24
Table 2: PTSD Item-Total Statistics.....	25
Table 3: Control Item-Total Statistics.....	28
Table 4: Nurture Item-Total Statistics.....	29

LIST OF FIGURES

	Page
Figure 1: PTSD Models.....	6
Figure 2: Inconsistent Nurturing as Control Theory Chart.....	11
Figure 3: Inconsistent Nurturing as Control Theory Scale with PTSD Constructs.....	16

CHAPTER I

INTRODUCTION

The United States has been at war since 2001. During this past decade, over 1.6 million military service personnel have served in Iraq and Afghanistan in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF; Seal, Metzler, Gima, Bertenthal, Maguen, & Marmar, 2009). Though the number of OIF and OEF veterans is staggeringly high, between 2002 and 2005 only 100,000 veterans were provided services by the Department of Veterans Affairs (Seal et al., 2009). Of those veterans, 40 percent had seen overseas warzone combat that led to traumatic injuries (Zeber, Noel, Pugh, Copeland, & Parchman, 2010).

A recent study indicated that the Department of Veterans Affairs (VA) treated over 1.2 million veterans for some type of mental health affliction in 2010, and of those, nearly 408,000 were diagnosed with Post-Traumatic Stress Disorder (Vogel, 2011). However, these statistics did not take into account the hundreds of thousands of soldiers who did not seek out treatment or support through the VA because they were unaware they have a mental disorder or they have been unable to accept the possibility of having a mental disorder (Seal et al., 2009).

Through combat experiences, military personnel are often faced with a fear of death, death of friends and fellow soldiers, combat-related killings of enemies of war, painful physical injuries, and gruesome scenes of slaughter (Bryan, Cukrowicz, West, &

Morrow, 2010). These kinds of experiences in war have often led to a condition called Post-Traumatic Stress Disorder (PTSD), an anxiety disorder that occurs after a traumatic event that is so significant that it causes the individual to continue experiencing the event after it occurs (Pearrow & Cosgrove, 2009). In veterans, symptoms of this disorder can be indicated by nightmares, agitation, numbing, flashbacks, anger, and insomnia, and can even result in suicide (Pearrow & Cosgrove, 2009).

In 2008, suicides among active-duty soldiers reached a 28-year high (Kuehn, 2009). Due to the continuing rise, the military has responded by working with the National Institute of Mental Health in an attempt to curb the increasing number of suicides (Kuehn, 2009). Similarly, suicide rates in male veterans between the ages of 18 to 29 have also seen a significant rise. Of the more than 30,000 suicides in the United States each year, 20 percent are committed by veterans (Hefling, 2010).

These staggering statistics have led the Department of Veteran Affairs to take a more direct role in providing resources for mental health treatment and introducing protocol to handle potentially suicidal veterans (Hefling, 2010). However, the VA has been unable to even meet the demand for the astounding number of veterans requiring care. Vogel (2011) reports that a recent survey issued by the Senate Committee on Veterans Affairs showed that 70 percent of social workers, nurses, and doctors that responded to a mandated survey think the VA “lacks the staff and space to meet the needs of growing numbers of veterans seeking mental health care” (para. 1). The study also concluded that even though some veterans have reached out for help, they were often turned away because of the high-demand and waiting period to receive treatment (Vogel, 2011).

According to Murphy (2008), although thousands of dollars of resources have been poured into reactionary support for returning veterans, there has not been much done to

proactively educate families of veterans who are the first line of defense in both identifying and combating mental disorders such as PTSD. The military have reacted to the condition after it has become severe rather than taking proactive measures that could help in identifying and treating veterans with PTSD before it progresses to a severe prognosis. Families have often had no support or information about how to aid their veteran relative who exhibits PTSD symptoms (Murphy, 2008).

As prevalent as PTSD and other mental disorders are in veterans, there is a lack of research based on the perspective of the family members, or caregivers. There is little to no information available that addresses how family members are identifying symptoms of PTSD and subsequently, what family support approaches they are taking when caring for the veteran. In addition to the lack of research on the family members' perspective, there are few scales that quantitative research can be based on. Most scales solicit responses from the individual receiving support, such as the Berlin Social Support Scale (Schulz & Schwarzer, 2003). It is from this perspective that past research bases its analysis of the quality of care. However, it is equally important to obtain the caregiver's self-assessment of the support they are providing.

Therefore, the purpose of the current study is to take an initial step toward validating a new quantitative measure that examines the relationship between family members' assessments of the support they are providing their veteran. The scale is designed to operationalize the inconsistent nurturing as control theory (INCT) and attempt to show how family members assess the symptomatic behavior of their veteran, and whether these family members take a controlling, nurturing, or inconsistent approach to deal with the veteran's PTSD behavior. By analyzing current strategies and tactics employed by family members in support of their veteran relative, Veterans Clinics and

Hospitals could learn how to better assist in recovery. This could help alleviate the overwhelming demand on the VA and other government programs to treat veterans, as well as helping to identify and treat PTSD in veterans before the prognosis becomes severe.

CHAPTER II

REVIEW OF LITERATURE

Posttraumatic Stress Disorder

Overview and History

Post-traumatic stress disorder is caused by experiencing a traumatic event that is outside the typical human experience, such as war, torture, rape, physical attack, and natural disaster (Friedman, 2007). Affected individuals typically relive the experience through intrusive recollections, both conscious and subconscious, leading to negative behavior such as insomnia, emotional numbing, anger, avoidance, and in extreme cases, suicide (Ray & Vanstone, 2009; Friedman, 2007).

PTSD is a type of anxiety disorder first accepted into the Diagnostic and Statistical Manual of Mental Disorders (DSM) in 1980 (Armour, Elhai, Richardson, Ractliffe, Wange & Elklit, 2012). Revisions to the DSM must occur regularly to ensure diagnosis continually reflects the research being done (Armour et al., 2012). Therefore, extensive research on PTSD has been ongoing since the early 1990s leading to disputes regarding its constructs (Armour et al., 2012). Researchers have long debated the number of constructs that comprise PTSD, indicating that the use of different structures can lead to an inaccurate diagnosis. However, a recent introduction of a five-factor structure, termed the Dysphoric Arousal Model (DAM), has shown promise in identifying individuals with PTSD (Elhai, Palmieri, Biehn, Frueh, & Magruder, 2012). Where other models consist of three or four

factors, the DAM factors include: Intrusion, Avoidance, Numbing, Dysphoric Arousal, and Anxious Arousal, each with correlating symptoms of PTSD, as displayed in Figure 1 (Armour et al., 2012; Elhai et al., 2012).

As Figure 1 illustrates below, each PTSD model combines the same 17 questions, such as are found on the PTSD Checklist (PCL-M). However, what differs between and among these models is what questions are associated with each factor. The figure also shows how each of the questions in the original DSM-IV model were grouped and how each following model compares to the others. The DAM is the first to separate the arousal factor into dysphoric arousal and anxious arousal, recognizing a difference between depression and anxiety (Armour et al., 2012). Note that in Figure 1 where R = Intrusion, I also = Intrusion (Armour et al., 2012).

Figure 1: PTSD Models

PTSD symptoms	PTSD models			
	DSM-IV	King: Numbing Model	Simms: Dysphoria Model	5-Factor: Dysphoric Arousal Model
B1: Intrusive thoughts	I	I	I	I
B2: Nightmares	I	I	I	I
B3: Reliving trauma	I	I	I	I
B4: Emotional cue reactivity	I	I	I	I
B5: Physiological cue reactivity	I	I	I	I
C1: Avoidance of thoughts	AV/N	AV	AV	AV
C2: Avoidance of reminders	AV/N	AV	AV	AV
C3: Trauma-related amnesia	AV/N	N	D	N
C4: Loss of interest	AV/N	N	D	N
C5: Feeling detached	AV/N	N	D	N
C6: Feeling numb	AV/N	N	D	N
C7: Hopelessness	AV/N	N	D	N
D1: Sleeping Difficulties	A	A	D	DA
D2: Irritability	A	A	D	DA
D3: Concentration Difficulties	A	A	D	DA
D4: Overly alert	A	A	A	AA
D5: Exaggerated Startle Response	A	A	A	AA

Note: R = Intrusion; AV = Avoidance; N = Numbing; A = Arousal; D = Dysphoria; DA = Dysphoric Arousal; AA = Anxious Arousal.

PTSD in Veterans

After the Vietnam War, veterans returned home facing a lack of support in a country they had just risked their lives to defend. Many veterans did not receive financial or medical help from the government, allowing mental disorders, such as PTSD, to worsen

over time (Salvatore, 2009). Due to this development after the Vietnam era, PTSD has become a more widely recognized outcome of combat. Though the VA now offers programs to address the issue of PTSD, it is still worsening. With the new era of wars in Iraq and Afghanistan, the VA and other veteran support agencies are facing the challenge of addressing the growing number of soldiers returning with symptoms of PTSD (Seal et al., 2009). Of over 723,000 veterans who saw combat in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), only 40 percent have entered Veterans' Affairs, and, of that percentage, nearly 37 percent have been diagnosed with a mental disorder, including PTSD (Friedman, 2007).

Though McDevitt-Murphy, Williams, Bracken, Fields, Monahan, and Murphy (2010) have indicated that PTSD symptoms are prevalent among OIF and OEF veterans, this finding may just mean that the Department of Veteran Affairs has taken a more active role over the last several decades in surveying outgoing soldiers to capture important data, such as PTSD rates, in order to attempt to support the growing number of those suffering from PTSD (Friedman, 2007).

Another reason PTSD symptoms seem to be predominant among OIF and OEF veterans is soldiers' increased length of deployment and an increase in the number of tours to a combat zone (Seal et al., 2009). During the Vietnam era, a soldier's tour of duty was one year; however, now soldiers serve in a combat zone for 12 to 15 months, with some having been deployed up to four times (Salvatore, 2009). Not only are the tours of duty longer, but soldiers are also completing tours in areas in which the landscape and demographic characteristics make it extremely difficult to differentiate between an enemy and a civilian (Salvatore, 2009). Soldiers are facing bombers and insurgents that can be

dressed as a common citizen or are even children who are tasked with completing the enemy's mission (Salvatore, 2009).

The characteristics of the soldiers themselves have also been indicators as to why PTSD is more prevalent among recent veterans. These characteristics have been identified by various studies. Many soldiers deployed to Iraq and Afghanistan in the last decade have been National Guard or military reserve members (Salvatore, 2009). They have not received adequate combat training nor the emotional preparation necessary to engage in combat in a hostile combat zone (Salvatore, 2009). These soldiers then return to their families and civilian jobs with little or no transition services.

Another reason PTSD has been more prevalent in veterans that have served in the last decade relates to the young age and lack of emotional maturity of enlisted soldiers. Active duty soldiers can now serve as young as age 16. Therefore, it is no surprise that veterans who served between the ages of 16 and 24 were at a much higher risk for developing PTSD than those who were over the age of 40 (Seal et al., 2009).

The symptoms of mental health disorders and PTSD have become more common among recent veterans, and the numbers have continued to grow. From 2004 to 2006, new mental health disorders nearly doubled in a study done of first time users of VA services (Seal et al., 2009). However, in a survey of over 300,000 army and marine veterans, only 35% had accessed VA services upon returning home from deployment (Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004). Many soldiers do not understand that their behavior is related to a mental disorder, and still others are afraid to admit that they have a problem and they do not reach out for help, which, in turn, increases the severity of their disorder (Seal et al., 2009). Veterans are also afraid to report their mental symptoms because they fear it could impede their career advancement (Salvatore, 2009). This

underreporting of mental health issues has meant less funding for the VA, so that veterans who acknowledge their mental disorder at a later period are not guaranteed the level of services they require. Lack of services to manage mental issues is among the top problems identified by veterans suffering from PTSD (Murphy, 2008). A recent study has shown that even VA employees recognize the fact that there are insufficient funds and services to meet the growing demand for help (Vogel, 2011).

In addition to there not being adequate treatment options for veterans, another study found that stressors that occur after a veteran has returned home from deployment to a war zone can increase the severity of PTSD symptoms (Vasterling, Proctor, Friedman, Hoge, Heeren, King, & King, 2010). In addition to facing unemployment following their exit from the armed forces, many returning veterans also face their own serious illness or the illness of a close family member (Vasterling et al, 2010). These additional stressors only add to the weight of the burden they carry as a war veteran, many times making the PTSD more severe.

Those veterans who exhibit symptoms of PTSD typically have resorted to alcohol for comfort in order to deal with their symptoms (Pearrow & Cosgrove, 2009). In some cases, this alcohol abuse has even led to more severe health problems, which may be physical, emotional and/or social (McDevitt-Murphy et al, 2010). Veterans of OIF and OEF also have exhibited a higher-risk for aggressive driving and aggressive-driving related accidents since they have been exposed to more enemy vehicle attacks (Kuhn, Drescher, Ruzek & Rosen, 2010).

In order to deal with the residual effects of PTSD from exposure to trauma in a combat zone, veterans need a certain level of family social support to assist in readjusting to life and its many difficulties. PTSD does not only impact the veteran's well-being, but it

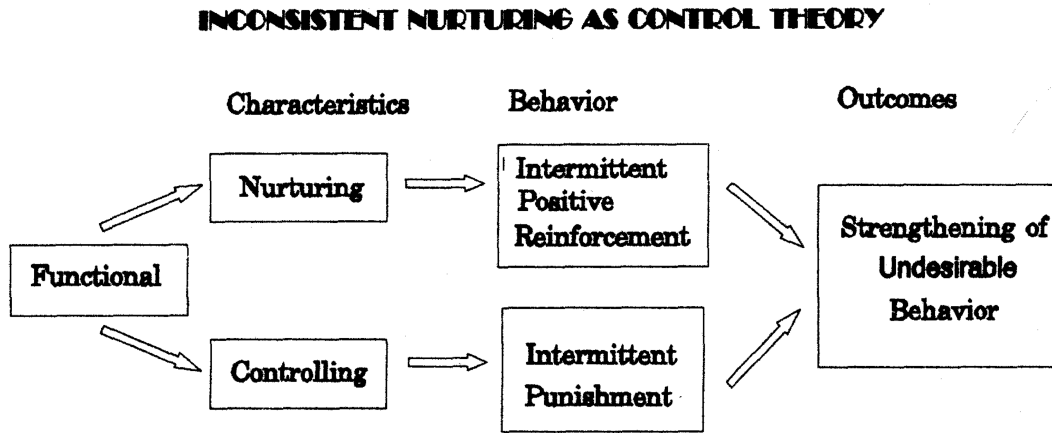
also has been shown to have an impact on his or her family members and their relationships, such as divorce, parenting satisfaction, family cohesion, and self-identity (Ray & Vanstone, 2009). Ray & Vanstone (2009) also indicated that any disruption in the family relationship could have a detrimental impact on the veteran's PTSD, causing further emotional withdrawal and numbing.

Inconsistent Nurturing as Control Theory

Overview

In 1995, Beth Le Poire embarked on the development of a new theory in family communication: the inconsistent nurturing as control theory (INCT; Le Poire, 1995; see Fig. 2.). The theory assumes that in a relationship, the functional partner competes to both nurture and control the afflicted partner in an attempt to diminish the troubled behavior (Dailey & Le Poire, 2006; Le Poire, Hallett, & Erlandson, 2000). In a relationship where one partner exhibits symptoms of dysfunction, functional partners do not initially recognize certain behaviors as being negative nor do they label them with a diagnosis. By either nurturing or attempting to control the behavior prior to labeling the issue, this can have a negative impact on the afflicted partner as well as the relationship with the functional partner (Duggan & Le Poire, 2006).

Figure 2: Inconsistent Nurturing as Control Theory Chart



There is an important distinction between the “functional” partner and the “afflicted” partner in that the functional partner in the relationship does not exhibit the same behaviors or symptoms as the afflicted partner (Le Poire, 1995). Le Poire (1995) differentiated between functional and afflicted by asking both partners to complete a quantitative survey analyzing the possible affliction, though this is not to say that the functional partner has not been affected by some type of physical or mental disorder. However, in the terms of the research that has been conducted, the functional partner was not suffering from the same illness as the afflicted partner (Le Poire et al., 2000). For the purposes of the current study, the **functional partner** has been defined as the family member participating in the research study, and the **afflicted partner** has been defined as the veteran who is receiving care from the functional partner. The functional family member will be qualified as a civilian, having not served in Operation Iraqi Freedom or Operation Enduring Freedom.

The inconsistent nurturing as control theory stresses family involvement when dealing with issues such as depression, substance abuse, and other disorders that affect the familial relationship (Le Poire, 1995). As evidenced by Figure 2, the theory differentiates the

functional partner's behavior as either reinforcement or punishment. Typically, the functional partner uses reinforcement at the onset of the afflicted behavior, followed by punishment in the hopes of curbing the affliction (Le Poire, 1992). When the functional partner observes unsuccessful results, he or she may finally resort to an inconsistent mixture of both reinforcement and punishment, which ultimately leads to a strengthening of the undesired behavior (Prescott & Le Poire, 2002).

Reinforcement is a positive action taken by the functional partner in an attempt to nurture his or her afflicted family member, usually out of lack of knowledge that the family member is experiencing a mental or physical problem or out of what he or she believes is a supportive effort to nurture the individual (Le Poire, 1995). However, what is typically defined as positive support may be an impediment when the functional family member is unaware of what the underlying issues are and how to treat them (Le Poire, 1995). The case is the same with using punishment to curb the afflicted family member's behavior. By not understanding the causes of the afflicted partner's behavior, misusing either one of these tactics may have an extremely negative effect and precipitate the growth of the problem (Le Poire, 1995).

Reinforcement and punishment behaviors have been further divided into verbal and non-verbal approaches to dealing with the afflicted partner's behavior. Verbal and non-verbal behavior of the functional partner can equally impact the behavior of the afflicted partner. The inconsistent nurturing as control theory suggests that the use of non-verbal behavior in both reinforcement and punishment can have an equally strong effect (Le Poire, 1995).

Past INCT Qualitative Research Studies

Past research of the inconsistent nurturing as control theory used qualitative approaches in determining the behaviors of the functional and afflicted partners. This section will review and describe the qualitative methodology employed by Le Poire and her colleagues in a variety of studies. The focus is on the qualitative protocol and not on the findings of each study per se.

Le Poire and her colleagues have used similarly structured interviews that included both partners responding to questions regarding their behavior (Daily & Le Poire, 2006; Duggan & Le Poire, 2006; Le Poire, 1995; Le Poire et al., 2000). Trained raters then examined the responses to determine if the communication behavior could be classified as an inconsistent, a nurturing, or a controlling support approach.

In one such study, participants were recruited (through media advertisements) and compensated for their time, then prescreened for the affliction of drug or alcohol abuse (Le Poire et al., 2000). Once the participants were deemed qualified, extensively trained raters went to the participants' homes to conduct an interview prompted by various questions relating to their relationship and the affliction (Le Poire et al., 2000). The responses to these questions were coded into support approaches, and the coders categorized behaviors in a specific timeline, such as pre-labeling of the behavior and post-labeling.

In another study of the inconsistent nurturing as control theory, participants in a romantic relationship where one has been identified as having depression were interviewed separately (Duggan & Le Poire, 2006). Participants were also recruited and compensated, however, the location was chosen by the participants rather than being conducted at their home (Duggan & Le Poire, 2006).

In 2008, Le Poire et al. conducted a similar study relating to substance abuse. The methods of the research were almost identical to previous studies, in which participants were recruited, compensated, prescreened, and then interviewed by a trained rater (Duggan, Dailey, & Le Poire, 2008).

Each of these studies regarding the inconsistent nurturing as control theory took extensive time, both for the researchers and the participants. The time to recruit volunteers, conduct a prescreening to determine eligibility, train raters, travel to the interview site, conduct the interview, and code the responses was staggering. Aside from the time commitment of the researchers, extensive time was required of the participants. They had to be willing to fully commit themselves and their family member with little compensation. Not only has time been a concern, but also the potential for skewed or socially acceptable answers from talking to a researcher about a sensitive subject face-to-face.

Any qualitative study takes extensive time, training, and people to conduct. As the current study points out, PTSD rates have continually risen while the resources and accessibility for care and financial support have decreased. It is therefore important to create a scale that can accomplish what the INCT qualitative studies have accomplished, but in a more time and resource efficient manner. With a new quantitative measure, a larger amount of data from more members of the target population can be collected and analyzed so that families with veterans that exhibit symptoms of PTSD can be assisted.

Rationale for A New Quantitative Measure: The INCT Scale

As PTSD rates continue to rise, it is increasingly vital to develop a quantitative measure that is geared toward the population from which data will be collected. In 2009, it was estimated that 6.8 percent of the general population suffered from PTSD, with the rate in veterans having increased to over 50 percent (Salvatore, 2009). Though these statistics

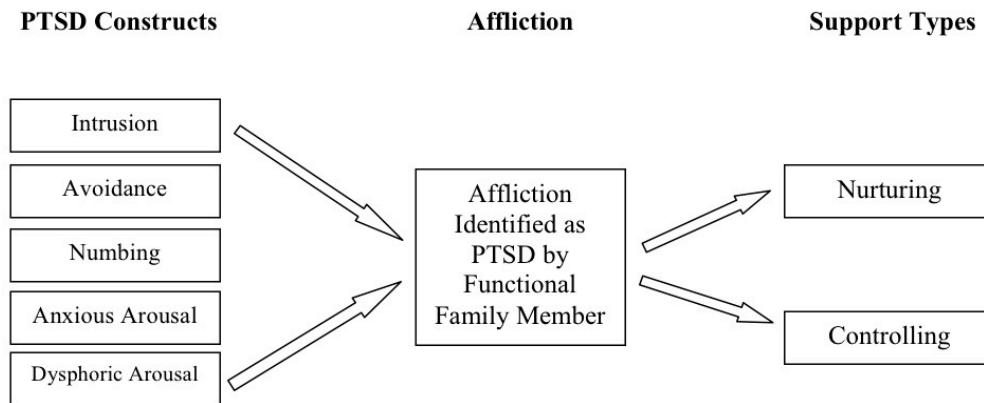
have continued to rise since Operation Iraqi Freedom and Operation Enduring Freedom, there are still few resources that can be used that appeal to the target population this study is focused on: veteran families (Seal et al., 2009). This target population is difficult to reach given the sensitive nature of the questioning, the mobility of military family units, and/or the nature of the relationship with the veteran. Additionally, PTSD is a sensitive subject that many military families are hesitant to disclose unless it is anonymous. These factors make a qualitative approach to researching this sample difficult and time consuming. Therefore, a generalized quantitative measure is needed that can be completed in a reasonable amount of time and accessed remotely via the Internet, allowing the families to submit information anonymously and quickly.

Though certain scales, like the Caregiving Appraisal Scale (Abe, 2007) and the PTSD Checklist (Wilkins, Lang, & Norman, 2011), are available, there is not a scale that measures either the presence of PTSD from a family member's or caregiver's perspective or how the caregiver is providing support to the individual identified with having PTSD, or another mental or physical affliction. It is important for a quantitative measure to be developed that addresses caregiving communication behaviors with veterans who have exhibited PTSD symptoms in order to collect data that can be valuable in addressing this specific problem.

As it has been pointed out throughout this rationale, mental afflictions can be improved or worsened based on the type of support given by a functional family member. However, in order for this to occur, a measure must first be developed that is accessible and accurately evaluates support approaches to identify how families can be better educated about the type of support to provide a veteran relative with a mental affliction, such as depression, anxiety, insomnia and PTSD.

As shown in Figure 3, once symptoms of the five PTSD constructs have been identified as an affliction, the functional family member will choose a path of support: controlling, nurturing, or inconsistent behavior, as illustrated in Figure 3.

Figure 3: Inconsistent Nurturing as Control Theory Scale with PTSD Constructs



Summary of Rationale

This study, therefore, uses the inconsistent nurturing as control theory (INCT) as a lens to examine the functional family member’s assessment of PTSD symptoms exhibited by their veteran and the family member’s approach to dealing with the veteran’s behavior (controlling, nurturing, or inconsistent). Though all previous studies of the inconsistent nurturing as control theory that have been conducted over the past 17 years all have been designed following a similar qualitative process that interviews both the functional partner and the afflicted partner, this study has taken an initial step toward validating a self-report scale that measures the functional family member’s perceptions of his or her use of controlling, nurturing, and inconsistent behaviors to address the PTSD behavior of the veteran

With an estimated 6.8 percent of the general population and over 50 percent of veterans suffering from PTSD, the need for support services is becoming even more

desperate (Salvatore, 2009). Only a portion of veterans seeks out the VA for help, and for those veterans who do reach out to the VA, it can take months and sometimes years for support services to become available. As mentioned earlier, Vogel (2011) reported that over 70 percent of social workers, nurses, and doctors that responded to a mandated survey think the VA “lacks the staff and space to meet the needs of growing numbers of veterans seeking mental health care” (para. 1). With PTSD rates rising and VA access diminishing, it is clear that families need more information on PTSD and how to support veterans. Therefore, the INCT scale has been designed to capture data to assess what support type family members use to respond their veteran relative who is exhibiting symptoms of PTSD.

Research Questions and Hypotheses

In order to assess the family member’s identification of PTSD of the veteran and the initial internal reliability of a scale that measures the family member’s knowledge and feelings around the type of support (controlling, nurturing, or inconsistent approach) they are providing their veteran, this study will utilize the following research questions and hypotheses:

RQ1: What is the prevalence of functional family members who identify symptoms of PTSD exhibited in their veteran?

RQ2: Is the Inconsistent Nurturing as Control Theory Scale a valid tool to use to assess the support approach taken by a functional family member toward an afflicted relative?

H1: Questions relating to control on the Inconsistent Nurturing as Control Theory Scale will achieve an internal reliability of .70 or above.

H2: Questions relating to nurture on the Inconsistent Nurturing as Control Theory Scale will achieve an internal reliability of .70 or above.

CHAPTER III

METHODOLOGY

This research study examined: 1) the functional family members' assessment of PTSD symptoms observed or inferred about their veterans' behavior; 2) the validity of the newly developed INCT Scale as a measure to assess the support approaches used by the functional family member when dealing with the veteran's behavior (controlling, nurturing, or inconsistent). The study also predicted that the questions developed on the Inconsistent Nurturing as Control Theory Scale would adequately measure the control and nurture variables. This chapter describes the methods used in the study to address the research questions and to test the hypotheses.

Participants

The researcher solicited responses from immediate family members of Operation Iraqi Freedom and Operation Enduring Freedom veterans by utilizing snowball sampling. This study set out to collect 30 unique responses that met the outlined criteria. A total of 31 responses were collected (N=31). However, of those responses, only 17 completed all questions, making the actual number of participants used in this study 17 (N=17). Out of the participants, only those who identified PTSD symptoms in the veteran were used in the data analysis. These responses provided information that addressed Research Question 1. Though the purpose of this study is to solicit family members that include parents, siblings, or spouses over the age of 18, it is understood that other types of family members can be

the primary caregiver of a veteran or interact with them on a day-to-day basis. Therefore, an option of “other” was provided to accommodate other types of family members who had observed the veteran’s behavior and were willing to complete the study. Institutional Review Board (IRB) approval was completed through The University of Texas-Pan American.

Measures

The Post-Traumatic Stress Disorder Checklist (PCL-M; $\alpha = 0.95$; Garvey Wilson, Hoge, McGurk, Thomas, & Castro, 2010) is a 17-item scale used to assess and diagnose symptoms of PTSD according to the Diagnostic and Statistical Manual of Mental Disorders (Vasterling et al., 2010). Using a 5-point Likert-type scale, respondents assessed the symptom severity that their veteran relative has displayed. Results of the responses were added so that a number between 0 and 85 is calculated. Scores over 50 indicate a presence of PTSD, so that the higher the score the more severe the prognosis. Scores 50 and under do not indicate PTSD, though there may be some symptoms present. The title of the PTSD Checklist was not included to avoid possible bias or influence in associated with the term “PTSD. ” It was hoped that elimination of the term would yield a more accurate assessment of symptoms by family members. (See Appendix A).

Respondents also answered 17 unique demographic questions about themselves, the veteran, and their relationship with the veteran (See Appendix C).

Development of the INCT Scale

As this study centers on the inconsistent nurturing as control theory, a scale was specifically created for this research, and this scale combined questions similar to those used by research undertaken by a qualitative research protocol (Le Poire, 1995; Le Poire et al., 2000; Prescott & Le Poire, 2002; Dailey & Le Poire, 2006; Duggan & Le Poire, 2006;

Duggan et al., 2008). First, a thorough review of past studies that used the inconsistent nurturing as control theory was completed. The studies evaluated the theory as it applied to afflictions such as eating disorders, depression, substance abuse, and alcoholism (Le Poire, 1995; Le Poire et al., 2000; Prescott & Le Poire, 2002; Dailey & Le Poire, 2006; Duggan & Le Poire, 2006; Duggan et al., 2008). In each study, trained coders assessed the theory by conducting interviews with the functional and afflicted partners. Once completed, content analysis was conducted on key words that aligned with the theory, as well as the frequency or pattern of behavior (both by the functional partner and the afflicted partner).

For the current study, content analysis was completed to identify questions used in the qualitative studies that related to nurturing, controlling, and inconsistency. These questions were then selected and prepared for the development of a new quantitative scale. The Inconsistent Nurturing as Control Theory Scale gathers information on functional family members' perceived support approach when dealing with the afflicted behavior of their family member, in this case the veteran's behavior (Le Poire, 1995; Le Poire et al., 2000; Prescott & Le Poire, 2002; Dailey & Le Poire, 2006; Duggan & Le Poire, 2006; Duggan et al., 2008; See Appendix B).

Whereas previous studies have used independent coding of reinforcement and punishment through an interview process consisting of the functional partner and the afflicted partner, the current study did not analyze the use of coercive power through positive reinforcement and punishment. However, it is important to note that in previous studies of the inconsistent nurturing as control theory, punishment reflected a controlling approach in the relationship by delivering a negative consequence in response to a behavior (Trenholm, 1989). Positive reinforcement reflected the nurturing or reinforcement aspect

of the inconsistent nurturing as control theory, in which a positive response to the behavior was issued (Trenholm, 1989).

The first step in evaluating the newly developed INCT Scale is assessing the internal reliability of the measure, as well as the variables of that measure. The study operationalizes Hypothesis 1 and Hypothesis 2 by calculating the Cronbach's alpha for control, nurture, and the scale as a whole.

Cronbach's alpha is used as a reliability measurement for scale development that assesses the consistency of responses to the variables that measure a given concept (Shelby, 2011). It was developed as a test of internal structure and measures how the responses correlate with the questions (variables) presented (Cronbach, 1951).

The data collected have been used to establish the initial internal reliability score, or Cronbach's coefficient alpha, for the newly developed quantitative measure of the inconsistent nurturing as control theory, which will serve as a base point for future research. This initial score was then used to determine the agreement between the inconsistent nurturing as control theory constructs and if they have been adequately adapted to a quantitative measure. More specifically, it assesses the reliability of nurture, control, and the use of multiple approaches to indicate inconsistency.

CHAPTER IV

RESULTS AND DISCUSSION

Results

This study yielded 17 qualified participants out of the total 31 respondents (N=17). The attrition rate of those that did not complete the full survey was 45%, meaning almost half the data collected was unusable. This can be attributed to both the nature of the survey and the order in which the questions were listed. PTSD is a sensitive topic that can be difficult for many individuals to discuss, which could have been a contributing factor as to why 14 individuals only began the survey and did not complete it. The order in which the measures were placed may have also contributed to people leaving the survey part of the way through. Participants were first asked to complete the 17-question PTSD Checklist (PCL-M), then the 26-question INCT Scale, and lastly the 17-question demographic scale. Starting with the sensitive subject of PTSD may have made people less likely to want to complete the entire survey. Future studies may want to consider beginning with the demographic scale in order to ease into the subject matter.

Of the 17 participants, six were between the ages of 18-29; one participant was between 30-39; three each were between 40-49 and 50-59, respectively; and four were 60 and older. All participants had a family member who had served in OIF and/or OEF. It is important to note that the relationship between the family member and the veteran varied, indicating the importance of creating a tool that is not biased toward a specific relationship

type. Three of the respondents were siblings, four spouses, five parents, and five who selected “other.” Of the participants, 12 were female and five were male. 100% of the sample indicated that the veteran they were reporting on was male. The military branches the veterans served under were Army (98%) and Air Force (2%). Respondents reported that 13 of the veterans were between the ages of 18-29 and four were 40 or older.

Initial research studies on PTSD cited in the rationale of this study were supported by the large percentages obtained on veteran behavior reported by the family member. Over 82% of respondents indicated that the veteran had been prescribed medication since leaving the military, and 76% noted that the veteran had shown signs of alcohol or drug abuse. However, when questions regarding alcohol and drug abuse were separated, nearly 59% reported evidence of consuming alcohol between 2-5x/week while only 5.9% reported drug consumption at any rate. It should be noted that questions regarding drugs did not specify the type of drug; therefore, respondents may have not included information regarding the abuse of prescription medications.

Research Question 1 asked what the prevalence of functional family members who identify symptoms of PTSD exhibited in their veteran would be. Of the 17 participants, 88% indicated that their veteran relative exhibited signs indicative of PTSD. This conclusion is determined by calculating the sum of the questions provided on the PTSD Checklist. The responses increase in increments of 1, so that the response “Not at all” is given a value of 1 and the response “Extremely” is given a value of 5. A score of 51 or higher indicates PTSD (Weathers, Litz, Herman, Huska, & Keane, 1993). The range of responses is 31, with a low score of 40 and a high score of 71. The average of the PTSD total is 55.

Though the reports of veteran behavior indicate patterns of affliction, potentially related to PTSD, 35% of the veterans were not receiving therapeutic treatment and only 6% of the family members sought out similar support to cope. Even though more than half of respondents had labeled the behavior as PTSD, only 3 out of the 17 respondents had even sought out information on how to handle the veteran’s behavior. Of those, *seeking advice from friends, the Internet, and social networking* were preferable to self-help books or other sources. Table 1 reflects the descriptive statistics of each of the demographic variables.

Table 1: Demographic Descriptive Statistics

	Mean	Median	Std. Deviation
Your age	2.88	3.00	1.65
Your veteran family member’s age	1.76	1.00	1.48
Your relationship with the veteran	2.53	3.00	1.23
Branch of the military the veteran served in	1.35	1.00	1.00
Did the veteran serve in Iraq/Afghanistan anytime since 2003?	1.18	1.00	.39
The veteran’s gender	1.00	1.00	.00
Your gender	1.71	2.00	.47
How many family members are currently living in your household?	2.94	3.00	.83
Has the veteran been prescribed any medication since leaving the military?	1.24	1.00	.56
Has the veteran shown signs of alcohol and/or drug abuse since leaving the military?	1.29	1.00	.59
How often does the veteran consume alcohol?	4.06	4.00	1.78
How often does the veteran abuse drugs?	6.29	7.00	1.21
Are you using any services (such as the VA) to support you and your veteran?	1.29	1.00	.47
Individual therapy for you	.06	.00	.24
Individual therapy for the veteran	.35	.00	.49
Group therapy for you	.06	.00	.24
Group therapy for the veteran	.06	.00	.24
Information	.06	.00	.24
Have you sought information on how to handle the veteran’s behavior?	.18	.00	.39
Internet	.24	.00	.44
Friends	1.29	1.00	.47
Social networking	.41	.00	.51
Self-help books	.06	.00	.24

Group therapy	.06	.00	.24
Individual therapy	.18	.00	.39
Other	.24	.00	.44
Have you labeled the behavior with a medical term?	.24	.00	.44

Though the PTSD Checklist is a credible and reliable tool for assessing the self-report of PTSD in military or former military personnel (Weathers et al., 1993), results obtained through this study indicate problems with the measure as a tool for caregivers to report their observations of symptoms and behaviors of veterans. When the Cronbach's Alpha was calculated for the PTSD Checklist, the resulting figure was only .773, a reliable yet concerning number for a tool that is so widely used to diagnose and treat PTSD. Clearly a more valid measure is needed in the use of assessing PTSD from the viewpoint of the caregiver, or in this case the family member attempting to support the veteran.

Table 2: PTSD Item-Total Statistics

	Mean	Std. Deviation	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Repeated, disturbing memories, thoughts, or images of a stressful military experience?	3.53	.717	.433	.759
Repeated, disturbing dreams of a stressful military experience?	4.12	.697	.310	.766
Suddenly acting or feeling as if a stressful military experience were happening again (as if they were reliving it)?	2.71	.985	.365	.762
Feeling very upset when something reminded the veteran of a stressful military experience?	3.59	.712	.516	.755
Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded the veteran of a stressful military experience?	3.41	1.004	.664	.737
Avoiding thinking about or talking	3.94	1.029	.113	.782

about a stressful military experience or avoiding having feelings related to it?				
Avoiding activities or situations because they reminded the veteran of a stressful military experience	3.24	1.091	.168	.779
Trouble remembering important parts of a stressful military experience?	2.65	1.169	.057	.790
Loss of interest in activities that the veteran used to enjoy	2.47	.717	.333	.765
Feeling distant or cut off from others	3.06	.966	.701	.735
Feeling emotionally numb or being unable to have loving feelings for those close to the veteran?	2.65	1.222	.437	.756
Feeling as if their future somehow will be cut short	2.24	1.033	.456	.754
Trouble falling or staying asleep	4.24	.970	.040	.786
Feeling irritable or having angry outbursts?	3.76	1.091	.454	.754
Having difficulty concentrating?	3.29	.920	.233	.772
Being “superalert” or watchful or on guard	3.65	1.057	.650	.737
Feeling jumpy or easily startled	3.29	.849	.388	.761

Research Question 2 asked if the Inconsistent Nurturing as Control Theory Scale is a valid tool to use to assess the support approach taken by a functional family member toward an afflicted relative. Though the data collected from a sample size of 17 participants indicated the scale has internal reliability, the process for determining the scale's validity is a multi-step process and cannot be concluded in this research study. Further research is needed.

The primary goal of this study was to take a first step toward developing a quantitative instrument for the inconsistent nurturing as control theory. Each of the respondents answered 26 questions regarding support approaches in relation to their veteran family member. 15 questions measured a controlling approach, 10 questions measured a nurturing approach, and one was specific to an inconsistent approach. When

analyzed in its entirety, the INCT measure yielded a Cronbach's Alpha of .762. However, the "control" and "nurture" variables were assessed separately to give a more accurate depiction of the reliability of the questions.

In addition to Cronbach's Alpha, the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett's Test of Sphericity were run to analyze the correlation between variables relating to "control" and "nurture". Values of the KMO range from 0 to 1, with anything over .5 being acceptable and indicating that the pattern of correlations is compact and should result in reliable factors (Field, 2009). Similarly, Bartlett's Test of Sphericity tests whether the correlation is an identity matrix, or measures how each variable correlates with the other. Significance is determined by achieving a value below .05 (Field, 2009).

The "control" portion of the scale yielded encouraging results by achieving a Cronbach's Alpha of .911. With an acceptable internal reliability over .7, the first hypothesis was supported, indicating that the 15 questions regarding "control" are in fact reliable. After analyzing the reliability of each question, it was determined that if a particular question was removed from the scale, its removal would affect the Cronbach's Alpha (α) score. However, only two questions indicated that if deleted from the scale the Cronbach's Alpha score would decrease to a value below .9. The questions involving *withholding affection* and *removing rewards*, if removed, would give the scale an alpha of .895 and .899, respectively.

Additionally, if removed, only two questions would have yielded a higher Cronbach's Alpha. By removing the questions regarding *ignoring the veteran's behavior* and *responding to behavior by yelling, raising, voice, cussing, etc.*, the alpha score would increase to .919 and .912, respectively (see Table 2). These changes would be small and

indicate excellent reliability and consistency in terms of scale validation. In addition to Cronbach's Alpha, Bartlett's Test of Sphericity reported a significance value of $p < .000$. Though the alpha value and Bartlett's test indicate reliable significance, the KMO reported a sampling adequacy of .437, just under the mediocre mark. However, if questions that primarily scored below a .3 on the correlation matrix were removed from the scale, the KMO increased to .485, which indicates that questions need to be more thoroughly examined and reworded to achieve higher significance.

Table 3: Control Item-Total Statistics

	Mean	Std. Deviation	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Responded negatively or forcefully (i.e. – reprimanded)	3.19	1.109	.626	.905
Engaged in physical violence	1.69	1.014	.569	.907
Made threats to leave	2.88	1.408	.487	.911
Made threats to kick the veteran out of the house	2.06	1.063	.758	.901
Used kids to punish the veteran	2.06	1.181	.566	.907
Responded to behavior by yelling, raising voice, cussing, etc.	2.94	1.526	.493	.912
Took over the veteran's family duties or roles	2.69	1.014	.800	.900
Nagged the veteran	2.56	1.031	.542	.907
Engaged in alcohol and/or substance abuse with the veteran	2.19	1.109	.727	.901
Denied there was a problem	2.25	1.183	.498	.909
Ignored the veteran's behavior	2.13	1.025	.135	.919
Withheld affections (i.e. – physical touch)	2.44	1.263	.885	.895
Removed rewards (i.e. – vacation, money, sex, and/or gifts)	2.06	1.063	.752	.901
Avoided spending time with the veteran	2.56	1.263	.773	.899
Became unresponsive to the veteran	2.06	.998	.630	.905

The “nurture” set of questions also proved reliable by yielding an acceptable Cronbach’s Alpha of .781. With an acceptable internal reliability over .7, the second hypothesis was supported, indicating that the 10-questions regarding nurture were in fact reliable. Though this measure is lower than that of the “control” questions, “nurture” still reports a reliable outcome. If the question regarding the *use of rewards (i.e., vacation, money, sex, and/or gifts)* was removed, Cronbach’s Alpha would increase to .851 (see Table 3). The strongest question asked respondents to indicate whether they had *asked the veteran what was wrong*. If removed, Cronbach’s Alpha would decrease to an unreliable value of .689. If deleted, no other question would cause the scale to lose significance.

Where “nurture” reported a lower Cronbach’s Alpha than “control”, in relation to the KMO test the value is higher, achieving a significant result, though only slightly, of .506. Similar to “control”, Bartlett’s Test of Sphericity reported significance with a value of .000. It is important to note that the KMO increases to .614 when questions that predominantly scored below a .3 on the correlation matrix were removed (i.e., *used rewards, tried to logically persuade the veteran to get help, and showed understanding*).

Table 4: Nurture Item-Total Statistics

	Mean	Std. Deviation	Corrected Item-Total Correlation	Cronbach’s Alpha if Item Deleted
Responded positively or passively (i.e. – accepted the behavior)	3.53	.743	.134	.797
Encouraged the veteran to talk to you	4.13	.915	.797	.710
Encouraged the veteran to seek professional help	4.27	.884	.761	.718
Used rewards (i.e. – vacation, money, sex, and/or gifts)	2.27	.799	-.373	.851
Tried to logically persuade the veteran to change behavior	3.80	.775	.284	.782
Spent more time with the veteran	3.53	.834	.690	.730
Been emotionally supportive	4.00	.756	.385	.770

Encouraged the veteran to exercise, writing, or other creative activities	4.13	.640	.529	.756
Showed understanding	4.07	.799	.506	.755
Asked the veteran what was wrong	4.00	1.000	.892	.689

Discussion

The results of the study reported here are encouraging. Data indicating the support of both hypotheses signify that the scale does in fact adequately measure controlling and nurturing support approaches used by functional family members in relation to their veteran family member who exhibits symptoms of PTSD. Though this is only a first step in developing the INCT Scale, the results indicate a promising start on which to base future research.

The results of both hypotheses support that the INCT Scale is an internally reliable measure with a reliable set of “control” questions and “nurture” questions. Though there are several questions that need to be further examined before final inclusion in the scale, the overall data set indicates that the questions each reflected their respected variable, control or nurture.

The results for Research Question 1 indicate that of the 17 respondents, 88% observed symptoms indicative of PTSD in their veteran family member. Though this is a small sample on which to base statistics of PTSD in veterans, it does show that more research needs to be done in the area. The current results support previous findings of PTSD rates in veterans by indicating that a large percent of OIF and OEF veterans exhibit symptoms of PTSD.

The PTSD Checklist dictates that any score higher than 50 reflects PTSD, with the highest score possible being 85, meaning that the higher the score, the stronger the symptoms of PTSD. The PTSD average for this study is 55, indicating that a majority of

participants do not see an incredibly strong presence of PTSD. These results could also mean that the PTSD Checklist may not be a valid tool in assessing the observation of PTSD in another individual, as we have used it here with family members reporting on symptoms exhibited by their veteran family member.

As mentioned earlier, Research Question 2 asked if the Inconsistent Nurturing as Control Theory Scale is a valid tool to use to assess the support approach taken by a functional family member toward an afflicted relative. Though the data collected from a sample size of 17 participants indicated the scale has internal reliability, the process for determining the scale's validity is a multi-step process and cannot be concluded in this research study. Further research is needed with more participants. The questions and statements may also need to be modified to avoid double-barreled or even triple-barreled items where participants may have difficulty responding to a forced choice that was the only available option.

One of the limitations in conducting this study was that there are very few options of quantitative measures for PTSD to choose from, and even more limited are the options through which to assess PTSD from a caregiver or family member's perspective. Therefore, the study used the PTSD Checklist, typically a self-assessment, and asked family members to respond based on their observations of their veteran's behavior. However, results from this portion of the study do not appear as reliable as expected. Given that the Cronbach's Alpha score is so close to being unacceptable, it is recommended that this measure be further analyzed for reliability and validity when not being used as a self-report measure.

The second and most significant limitation was the sample size used in the study. Though the results from a sample of 17 participants are encouraging, it is clear that a much

larger sample is needed to validate the INCT Scale. Future researchers should be aware that this specific target population is more difficult to reach and, therefore, a more detailed plan of data collection is needed to ensure a larger sample size is acquired.

There are many directions future research can take from this study. As previously discussed, PTSD among OIF and OEF veterans is an increasingly difficult problem that takes a toll on the veterans and their families, as well as on taxpayers and governmental funding to the VA. Therefore, future research may need to focus on modifying the PTSD Checklist for use by family members. In addition, further development of a validation process is needed to re-examine the current INCT Scale and make the appropriate changes so that each variable is represented by valid and reliable questions. Future research should also outline the validation process and how it will be accomplished.

REFERENCES

- Abe, K. (2007). Reconsidering the Caregiving Stress Appraisal scale: Validation and examination of its association with items used for assessing long-term care insurance in Japan. *Archives Of Gerontology & Geriatrics, 44*(3), 287-297.
- Armour, C., Elhai, J. D., Richardson, D., Ractliffe, K., Wange, L., and Elklit, A. (2012) Assessing a five factor model of PTSD: Is dysphoric arousal a unique PTSD construct showing differential relationships with anxiety and depression?. *Journal of Anxiety Disorders, 26*(2), 368-376.
- Bryan, C. J., Cukrowicz, K. C., West, C. L., & Morrow, C. E. (2010). Combat experience and the acquired capability for suicide. *Journal of Clinic Psychology, 6*, 1044-1056.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297-334.
- Dailey, R. M. & Le Poire, B. A. (2006). Inconsistent nurturing as control theory: A new theory in family communication. In L. A. Baxter & D. O. Braithwaite (Eds.), *Engaging theories in family communication: Multiple perspectives* (pp. 82-98). Thousand Oaks, California: Sage Publications, Inc.
- Duggan, A. P., Dailey R. M., & Le Poire, B. A. (2008). Reinforcement and punishment of substance abuse during ongoing interactions: A conversational test of inconsistent nurturing as control theory. *Journal of Health Communication, 13*(5), 417-433.
- Duggan, A. P., & Le Poire, B. A. (2006). One down, two involved: An application and extension of inconsistent nurturing as control theory to couples including one depressed individual. *Communication Monographs, 73*(4), 379-405.
- Elhai, J. D., Palmieri, P. A., Biehn, T. L., Frueh, B. C., & Magruder, K. M. (2012). Post-traumatic stress disorders frequency and intensity ratings are associated with factor structure differences in military veterans. *Psychological Assessment, 22*, 723-728.
- Field, A. P. (2005). *Discovering statistics with SPSS* (3rd ed.). London: Sage Publications Ltd.
- Friedman, M. J. (2007, January 31). Posttraumatic stress disorder: An overview. Retrieved from: <http://www.ptsd.va.gov/professional/pages/ptsd-overview.asp>

- Garvey Wilson, A. L., Hoge, C. W., McGurk, D., Thomas, J. L., & Castro, C. A. (2010). Stability of combat exposure recall in Operation Iraqi Freedom veterans. *Annals of Epidemiology, 20*(12), 939-947.
- Hefling, K. (2010, January 12). Veteran's suicide rate sees significant increase. Retrieved from: <http://www.deseretnews.com/article/705357883/Veterans-suicide-rate-sees-significant-rise.htm>
- Hoge, C. W., Castro, C.A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine, 351*(1), 13-22.
- Kuehn, B. M. (2009). Soldier suicide rates continue to rise. *JAMA: Journal of the American Medical Association, 301*(11), 1111-1113.
- Kuhn, E., Drescher, K., Ruzek, J., & Rosen, C. (2010). Aggressive and unsafe driving in male veterans receiving residential treatment for PTSD. *Journal of Traumatic Stress, 23*(3), 399-402.
- Le Poire, B. A. (1995). Inconsistent nurturing as control theory: Implications for communication-based research and treatment programs. *Journal of Applied Communication Research, 23*(1), 60-74.
- Le Poire, B. A., Hallett, J. S., & Erlandson, K. T. (2000). An initial test of inconsistent nurturing as control theory: How partners of drug abusers assist their partners' sobriety. *Human Communication Research, 26*(3), 432.
- McDevitt-Murphy, M. E., Williams, J. L., Bracken, K. L., Fields, J. A., Monahan, C. J., & Murphy, J. G. (2010). PTSD symptoms, hazardous drinking, and health functioning among U.S.OEF and OIF veterans presenting to primary care. *Journal of Traumatic Stress, 23*(1), 108-111.
- Murphy, R. (2008). The isolated, emotional, and incomplete storyteller: Message board narratives of combat veterans living with PTSD. *Conference Papers – National Communication Association, 1*, 25.
- Pearrow, M. & Cosgrove, L. (2009). The aftermath of combat-related PTSD: Toward an understanding of transgenerational trauma. *Communication Disorders Quarterly, 30*(2), 177-82.
- Prescott, M. E., & Le Poire, B. A. (2002). Eating disorders and mother-daughter communication: A test of inconsistent nurturing as control theory. *Journal of Family Communication, 2*(2), 59-78.
- Ray, S. L., & Vanstone, M. (2009). The impact of PTSD on veterans' family relationships: An interpretative phenomenological inquiry. *International Journal of Nursing Studies, 46*(6), 838-847.

- Salvatore, R. P. (2009). Posttraumatic stress disorder: A treatable public health problem. *Health & Social Work, 34*(2), 153-155.
- Schulz, U. & Schwarzer, R. (2003). Social support in coping with illness: The Berlin social support scales (BSSS). *Diagnostica, 49*, 73-82.
- Seal, K. H., Metzler, T. J., Gima, K. S., Bertenthal, D., Maguen, S., & Marmar, C. R. (2009). Trends and risk factors for mental health diagnoses among Iraq and Afghanistan veterans using department of veterans affairs health care, 2002-2008. *American Journal of Public Health, 99*(9), 1651-1658.
- Shelby, L. B. (2011). Beyond Cronbach's alpha: Considering confirmatory factor analysis and segmentation. *Human Dimensions Of Wildlife, 16*(2), 142-148.
- Trenholm, S. (1989) *Persuasion and social influence*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Vasterling, J. J., Proctor, S. P., Friedman, M. J., Hoge, C. W., Heeren, T., King, L. A., & King, D. W. (2010). PTSD symptom increases in Iraq-deployed soldiers: Comparison with nondeployed soldiers and associations with baseline symptoms, deployment experiences, and postdeployment stress. *Journal of Traumatic Stress, 23*(1), 41-51.
- Vogel, S. (October 3, 2011). VA lacks resources to deal with mental health, survey finds. *The Washington Post*. Retrieved from <http://www.washingtonpost.com/politics/va-lacks-resources-to-deal-with-mental-health-survey-finds>.
- Weathers, F., Litz, B., Herman, D., Huska, J., & Keane, T. (October 1993). The PTSD Checklist (PCL): Reliability, Validity, and Diagnostic Utility. Paper presented at the Annual Convention of the International Society for Traumatic Stress Studies, San Antonio, TX.
- Wilkins, K. C., Lang, A. J., & Norman, S. B. (2011). Synthesis of the psychometric properties of the PTSD checklist (PCL) military, civilian, and specific versions. *Depression & Anxiety (1091-4269), 28*(7), 596-606.
- Zeber, J. E., Noel, P. H., Pugh, M. J., Copeland, L. A., & Parchman, M. L. (2010). Family perceptions of post-deployment healthcare needs of Iraq/Afghanistan military personnel. *Mental Health in Family Medicine, 7*, 135-143.

APPENDIX A

APPENDIX A

PTSD CHECKLIST – MILITARY VERSION (PCL-M)

Instructions: Below is a list of problems and complaints that veterans sometimes have in response to a stressful military experience. Please read each one carefully and indicate the amount you have observed this behavior in your veteran family member. (If you have more than one veteran family member please fill out a survey for each.)

1. Repeated, disturbing memories, thoughts, or images of a stressful military experience?

Not at all A little bit Moderately Quite a bit Extremely

2. Repeated, disturbing dreams of a stressful military experience?

Not at all A little bit Moderately Quite a bit Extremely

3. Suddenly acting or feeling as if a stressful military experience were happening again (as if they were reliving it)?

Not at all A little bit Moderately Quite a bit Extremely

4. Feeling very upset when something reminded the veteran of a stressful military experience?

Not at all A little bit Moderately Quite a bit Extremely

5. Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded the veteran of a stressful military experience?

Not at all A little bit Moderately Quite a bit Extremely

6. Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?

Not at all A little bit Moderately Quite a bit Extremely

7. Avoiding activities or situations because they reminded the veteran of a stressful military experience?

- Not at all A little bit Moderately Quite a bit Extremely*
8. Trouble remembering important parts of a stressful military experience?
- Not at all A little bit Moderately Quite a bit Extremely*
9. Loss of interest in activities that the veteran used to enjoy?
- Not at all A little bit Moderately Quite a bit Extremely*
10. Feeling distant or cut off from other people?
- Not at all A little bit Moderately Quite a bit Extremely*
11. Feeling emotionally numb or being unable to have loving feelings for those close to the veteran?
- Not at all A little bit Moderately Quite a bit Extremely*
12. Feeling as if their future somehow will be cut short?
- Not at all A little bit Moderately Quite a bit Extremely*
13. Trouble falling or staying asleep?
- Not at all A little bit Moderately Quite a bit Extremely*
14. Feeling irritable or having angry outbursts?
- Not at all A little bit Moderately Quite a bit Extremely*
15. Having difficulty concentrating?
- Not at all A little bit Moderately Quite a bit Extremely*
16. Being “superalert” or watchful or on guard?
- Not at all A little bit Moderately Quite a bit Extremely*
17. Feeling jumpy or easily startled?
- Not at all A little bit Moderately Quite a bit Extremely*

APPENDIX B

APPENDIX B

INCONSISTENT NURTURING AS CONTROL THEORY SCALE

Instructions: Below is a list of statements or questions. Please indicate your level of agreement.

When dealing with the behavior of my veteran, I have...

1. Responded negatively or forcefully (i.e. – reprimanded)

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

2. Responded positively or passively (i.e. – accepted the behavior)

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

3. Switched between negative and positive responses

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

4. Engaged in physical violence

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

5. Made threats to leave

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

6. Made threats to kick the veteran out of the house

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

7. Used kids to punish the veteran

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

8. Responded to behavior by yelling, raising voice, cussing, etc.

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

9. Took over the veteran's family duties or role
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
10. Nagged the veteran
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
11. Engaged in alcohol and/or substance abuse with the veteran
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
12. Denied there was a problem
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
13. Ignored the veteran's behavior
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
14. Withheld affection (i.e. – physical touch)
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
15. Removed rewards (i.e. – vacation, money, sex, and/or gifts)
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
16. Avoided spending time with the veteran
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
17. Became unresponsive to the veteran
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
18. Encouraged the veteran to talk to you
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
19. Encouraged the veteran to seek professional help
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*
20. Used rewards (i.e. – vacation, money, sex, and/or gifts)
- Strongly Disagree* *Disagree* *Neutral* *Agree* *Strongly Agree*

21. Tried to logically persuade the veteran to change behavior

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

22. Spent more time with the veteran

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

23. Been emotionally supportive

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

24. Encouraged the veteran to exercise, writing, or other creative activities

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

25. Showed understanding

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

26. Asked the veteran what was wrong

Strongly Disagree *Disagree* *Neutral* *Agree* *Strongly Agree*

APPENDIX C

APPENDIX C

DEMOGRAPHIC SCALE

Instructions: Below is a list of questions that relate to you and your veteran family member. Please read each one carefully and indicate your response by circling the appropriate response.

1. Your age

18-29 *30-39* *40-49* *50-59* *60 or older*

2. Your veteran family member's age

18-29 *30-39* *40-49* *50-59* *60 or older*

3. Your relationship with the veteran

Parent *Sibling* *Spouse* *Other*

4. Branch of the military did the veteran served in

Army *Marines* *Navy* *Air Force* *Other*

5. Did the veteran serve in Iraq/Afghanistan anytime since 2003?

Yes *No* *I don't know*

6. The veteran's gender

Male *Female*

7. Your gender

Male *Female*

8. How many family members are currently living in your household?

0 *1-2* *3-4* *5-6* *7 or more*

9. Has the veteran been prescribed any medication since leaving the military?

Yes *No* *I don't know*

10. Has the veteran shown signs of alcohol and/or drug abuse since leaving the military?

Yes *No* *I don't know*

11. How often does the veteran consume alcohol?

Less than 1x/week *1x/week* *2-3x/week* *4-5x/week*
6-7x/week *Don't Know* *Never*

12. How often does the veteran abuse drugs?

Less than 1x/week *1x/week* *2-3x/week* *4-5x/week*
6-7x/week *Don't Know* *Never*

13. Are you using any services (such as the VA) to support you and your veteran?)

Yes *No* *I don't know*

14. If yes, what services are you using (may circle more than one answer)?

Ind. Therapy for you *Ind. Therapy for the veteran* *Group therapy for you*
Group therapy for the veteran *Information*

15. Have you sought information on how to handle the veteran's behavior?

Internet *Friendship* *Social networking* *Self-help books*
Group therapy *Individual therapy* *Not applicable*

16. Have you labeled the behavior with a medical term?

Yes *No* *I don't know*

17. If so, what did you label it with:

APPENDIX D

APPENDIX D

CODEBOOK

DEMOGRAPHIC SCALE (Questions 1-18)

V1. AGE (Your age)

- 01 18-29
- 02 30-39
- 03 40-49
- 04 50-59
- 05 60 or older

V2. VETAGE (Your veteran family member's age)

- 01 18-29
- 02 30-39
- 03 40-49
- 04 50-59
- 05 60 or older

V3. RELVET (Your relationship with the veteran)

- 01 Parent
- 02 Sibling
- 03 Spouse
- 04 Other

V4. BRANCH (Branch of the military the veteran served in)

- 01 Army
- 02 Marines
- 03 Navy
- 04 Air Force
- 05 Other

- V5. IRAQAF (Did the veteran serve in Iraq/Afghanistan anytime since 2003?)
- 01 Yes
 - 02 No
 - 03 I don't know
- V6. VETGEN (The veteran's gender)
- 01 Male
 - 02 Female
- V7. GENDER (Your gender)
- 01 Male
 - 02 Female
- V8. HOUSE (How many family members are currently living in your household?)
- 01 0
 - 02 1-2
 - 03 3-4
 - 04 5-6
 - 05 7 or more
- V9. MED (Has the veteran been prescribed any medication since leaving the military?)
- 01 Yes
 - 02 No
 - 03 I don't know
- V10. ALDRUG (Has the veteran shown signs of alcohol and/or drug abuse since leaving the military?)
- 01 Yes
 - 02 No
 - 03 I don't know
- V11. ALCH (How often does the veteran consume alcohol?)
- 01 Less than 1x/week
 - 02 1x/week
 - 03 2-3x/week
 - 04 4-5x/week
 - 05 6-7x/week
 - 06 Don't Know
 - 07 Never

V12. DRUGS (How often does the veteran abuse drugs?)

- 01 Less than 1x/week
- 02 1x/week
- 03 2-3x/week
- 04 4-5x/week
- 05 6-7x/week
- 06 Don't Know
- 07 Never

V13. SUPUSE (Are you using any services (such as the VA) to support you and your veteran?)

- 01 Yes
- 02 No
- 03 I don't know

(If yes, what services are you using (may circle more than one answer):)

- V14 INDTHY Ind. Therapy for you
- V15 INDTHV Ind. Therapy for the veteran
- V16 GROUPY Group therapy for you
- V17 GROUPV Group therapy for the veteran
- V18 INFO Information

V19. SUPTYP (Have you sought information on how to handle the veteran's behavior?)

- 01 Yes
- 02 No
- 03 I don't know

(If yes, where have you sought information from (may choose more than one answer):)

- V20 INTERN Internet
- V21 FRIEND Friends
- V22 SOCNET Social networking
- V23 BOOKS Self-help books
- V24 GROUP Group therapy
- V25 INDTH Individual therapy
- V26 OTHER Other

V27. TERM (Have you labeled the behavior with a medical term?)

- 01 Yes
- 02 No
- 03 I don't know

V28. LABEL (If so, what did you label it with:)

9 Filled in
999 Blank

PTSD (Questions 19-35)

01 Not at all
02 A little bit
03 Moderately
04 Quite a bit
05 Extremely

V29. MEMORY (Repeated, disturbing memories, thoughts, or images of a stressful military experience?)

V30. DREAMS (Repeated, disturbing dreams of a stressful military experience?)

V31. RELIVE (Suddenly acting or feeling as if a stressful military experience were happening again (as if they were reliving it)?)

V32. UPSET (Feeling very upset when something reminded the veteran of a stressful military experience?)

V33. PHYSRE (Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded the veteran of a stressful military experience?)

V34. AVTHNK (Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?)

V35. AVACT (Avoiding activities or situations because they reminded the veteran of a stressful military experience?)

V36. TRREMB experience? (Trouble remembering important parts of a stressful military experience?)

V37. LOSSIN (Loss of interest in activities that the veteran used to enjoy?)

V38. DISTAN (Feeling distant or cut off from other people?)

V39. NUMB (Feeling emotionally numb or being unable to have loving feelings for those close to the veteran?)

- V40. FUTURE (Feeling as if their future somehow will be cut short?)
- V41. SLEEP (Trouble falling or staying asleep?)
- V42. ANGRY (Feeling irritable or having angry outbursts?)
- V43. CONCEN (Having difficulty concentrating?)
- V44. ALERT (Being “superalert” or watchful or on guard?)
- V45. JUMPY (Feeling jumpy or easily startled?)

INCONSISTENT NURTURING AS CONTROL THEORY (Questions 36-61)

3 Constructs: **Control**, **Nurture**, and **Inconsistency**

- 01 Strongly Disagree
- 02 Disagree
- 03 Neutral
- 04 Agree
- 05 Strongly Agree

- V46. **RESNEG** (Responded negatively or forcefully (i.e. – reprimanded))
- V47. **RESPOS** (Responded positively or passively (i.e. – accepted the behavior))
- V48. **SWITCH** (Switched between negative and positive responses)
- V49. **VIOLEN** (Engaged in physical violence)
- V50. **LEAVE** (Made threats to leave)
- V51. **KICK** (Made threats to kick the veteran out of the house)
- V52. **KIDS** (Used kids to punish the veteran)
- V53. **YELL** (Responded to behavior by yelling, raising voice, cussing, etc.)
- V54. **VETDUT** (Took over the veteran’s family duties or role)
- V55. **NAGGED** (Nagged the veteran)
- V56. **ALCDRG** (Engaged in alcohol and/or substance abuse with the veteran)
- V57. **DENIED** (Denied there was a problem)

- V58. **IGNORE** (Ignored the veteran's behavior)
- V59. **WITAFF** (Withheld affection (i.e. – physical touch))
- V60. **REMREW** (Removed rewards (i.e. – vacation, money, sex, and/or gifts))
- V61. **AVTIME** (Avoided spending time with the veteran)
- V62. **UNRESP** (Became unresponsive to the veteran)
- V63. **ENTALK** (Encouraged the veteran to talk to you)
- V64. **ENHELP** (Encouraged the veteran to seek professional help)
- V65. **REWARD** (Used rewards (i.e. – vacation, money, sex, and/or gifts))
- V66. **PERSUA** (Tried to logically persuade the veteran to change behavior)
- V67. **MORTME** (Spent more time with the veteran)
- V68. **EMSUPP** (Been emotionally supportive)
- V69. **ENACTV** (Encouraged the veteran to exercise, writing, or other creative activities)
- V70. **UNDERS** (Showed understanding)
- V71. **ASKWRG** (Asked the veteran what was wrong)

BIOGRAPHICAL SKETCH

Danielle Marie Reed earned a Master of Arts in Communication from The University of Texas-Pan American in August 2012. She received a Bachelor of Science in History from the State University of New York College at Oneonta in May 2007. During her time as a graduate student, she also earned a Graduate Certificate in Media Relations. Reed currently resides in McAllen, Texas. She can be contacted at danielle.m.reed@hotmail.com.