THE ROLE OF RESILIENCE AND SOCIAL SUPPORT IN PREDICTING POST-DEPLOYMENT ADJUSTMENT IN NAVY PERSONNEL

By

CRAIG ANDREW CUNNINGHAM

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2012
To the brave men and women of the United States Navy who volunteer to serve this great nation and place themselves in harm’s way to protect, preserve, and promote freedom and to my wife and children
ACKNOWLEDGMENTS

I thank the Navy personnel who took the time to participate in this study and share their post-deployment thoughts and experiences. This dissertation would not have been possible without them.

I thank Deborah Jones, my new found friend, for her help in coordinating the recruitment of study participants. Her kind spirit and commitment to “serving those who serve” touched the lives of many sailors and her efforts will never be forgotten. She has surely stored up riches in heaven.

I thank my chair and members of my supervisory committee who have generously given their time and expertise to better my work and research skills. I thank Dr. Bryan Weber who invested a tremendous amount of time challenging me, helping me organize my thoughts, and helping me express my thoughts in the written word. I especially thank him for his patience, kindness, and sharing of his personal experiences. His skillful approach — to breaking the daunting task of completing a dissertation into manageable sections — greatly increased my confidence. I thank Dr. Beverly Roberts for helping me learn statistics in the classroom and then applying this knowledge during data analysis. Her guidance helped make data analysis one of the most enjoyable sections to write. I thank Dr. Wayne Griffin who never failed to offer an encouraging word. I treasure the time spent in his class, Trauma & Crisis Intervention, and I continue to draw upon the wisdom he shared during our independent study experience. I thank Dr. Tracy Hejmanowski for listening, understanding, and occasionally being my personal counselor. I thank her for sharing her passion for “serving those who serve”, for being the type of person I strive to emulate, and for opening her door and her clinic.
This research would not have been possible without her support. I thank Dr. Barbara Lutz for graciously agreeing to join my dissertation committee. I will never forget her patient instruction and guidance in helping me discover and understand my world views.

I thank my wife Rhonda for her patience, insightful understanding, and loving support. She was always willing to listen as I expressed my ideas and I consider this to be a vital part of my success. I thank my kids (Jared, Blake, and Alysha) for inspiring me to achieve my goals and for reminding me to laugh. I thank Dad (Gene) and Mom (Betty) for instilling in me the belief that anything is possible with hard work. My family helped me find strength to endure the unanticipated personal and professional challenges that were experienced during this program. God Bless everyone who contributed to the success of this dissertation.

This dissertation was written by Craig Andrew Cunningham while a student at the University of Florida studying for a degree in nursing sciences. The views expressed in this dissertation are those of the author and do not reflect the official policy or position of the Department of the Navy, Department of Defense, nor the U.S. Government.

I am a military service member. This work was prepared as part of my official duties. Title 17 U.S.C. 105 provides that “Copyright protection under this title is not available for any work of the United States Government”. Title 17 U.S.C. 101 defines a United States Government work as a work prepared by a military service member or employee of the United States Government as part of that person’s official duties.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>4</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>9</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>10</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>11</td>
</tr>
<tr>
<td>DEFINITION OF TERMS</td>
<td>12</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>15</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1  PROBLEM</td>
<td>17</td>
</tr>
<tr>
<td>Post-Deployment Adjustment</td>
<td>17</td>
</tr>
<tr>
<td>Study Purpose</td>
<td>19</td>
</tr>
<tr>
<td>Significance to Navy Nursing</td>
<td>19</td>
</tr>
<tr>
<td>Conceptual Framework</td>
<td>20</td>
</tr>
<tr>
<td>Adjustment to Transitions</td>
<td>20</td>
</tr>
<tr>
<td>Characteristics of the Transition</td>
<td>21</td>
</tr>
<tr>
<td>Characteristics of the Transition Environment</td>
<td>21</td>
</tr>
<tr>
<td>Characteristics of the Individual</td>
<td>22</td>
</tr>
<tr>
<td>Research Questions and Hypotheses</td>
<td>22</td>
</tr>
<tr>
<td>2  LITERATURE REVIEW</td>
<td>25</td>
</tr>
<tr>
<td>Deployment Experiences</td>
<td>25</td>
</tr>
<tr>
<td>Deployment and Redeployment Preparations</td>
<td>27</td>
</tr>
<tr>
<td>Deployment Preparations</td>
<td>27</td>
</tr>
<tr>
<td>Redeployment Preparations</td>
<td>27</td>
</tr>
<tr>
<td>Post-deployment Adjustment</td>
<td>29</td>
</tr>
<tr>
<td>Altered Home Life and Support Network</td>
<td>30</td>
</tr>
<tr>
<td>Altered Work Life and Support Network</td>
<td>31</td>
</tr>
<tr>
<td>Post-deployment Adjustment Assistance</td>
<td>32</td>
</tr>
<tr>
<td>Resilience, Social Support, and Sojourner Studies</td>
<td>32</td>
</tr>
<tr>
<td>Resilience</td>
<td>33</td>
</tr>
<tr>
<td>Social Support</td>
<td>34</td>
</tr>
<tr>
<td>Sojourner Studies</td>
<td>34</td>
</tr>
<tr>
<td>Summary of Problem</td>
<td>35</td>
</tr>
</tbody>
</table>
3 METHODS .......................................................................................................................... 37

Study Design ....................................................................................................................... 37
Setting ................................................................................................................................. 37
Sample .................................................................................................................................. 38
   Inclusion Criteria ............................................................................................................... 39
   Exclusion Criteria ............................................................................................................ 40
Sample Size ......................................................................................................................... 40
Measurement ........................................................................................................................ 41
   Demographic Variables .................................................................................................... 41
   Post-deployment Adjustment ............................................................................................ 42
   Predictor Variables .......................................................................................................... 43
      Resilience ..................................................................................................................... 43
      Post-deployment social support ..................................................................................... 43
      Deployment environment ............................................................................................... 44
      Combat exposure .......................................................................................................... 45
      Life events .................................................................................................................... 45
   Covariates ........................................................................................................................ 46
      Rationale for covariates ................................................................................................. 46
      Covariate measures ....................................................................................................... 47
Procedure .............................................................................................................................. 47
   Recruitment ...................................................................................................................... 47
   Recruitment Support ....................................................................................................... 48
   Screening and Recruitment Procedures ............................................................................ 50
   Informed Consent ............................................................................................................. 50
Data Collection ..................................................................................................................... 51
   Participant Accrual ............................................................................................................ 51
Data Management ................................................................................................................ 52
   Data coding ....................................................................................................................... 52
   Data cleaning .................................................................................................................... 53
   Missing data ..................................................................................................................... 53
   Data entry ........................................................................................................................ 54
Data Analysis ......................................................................................................................... 55
   Preliminary analysis ......................................................................................................... 55
   Main analysis ................................................................................................................... 56
   Adjusting for covariates ................................................................................................. 57
Protection of Human Subjects ............................................................................................... 58
   Assurances ....................................................................................................................... 58
   Informed Consent ............................................................................................................. 58
   Anonymous Participation and Anonymous Responses .................................................... 58
   Burden and Risk ................................................................................................................ 59
   Resources ........................................................................................................................ 60

4 RESULTS .......................................................................................................................... 65

Participation Accrual Rates ................................................................................................ 65
Sample Representativeness ................................................................................................. 65
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Characteristics</td>
<td>66</td>
</tr>
<tr>
<td>Preliminary Analysis</td>
<td>66</td>
</tr>
<tr>
<td>Missing Values</td>
<td>66</td>
</tr>
<tr>
<td>Data Cleaning</td>
<td>67</td>
</tr>
<tr>
<td>Variable Descriptives</td>
<td>67</td>
</tr>
<tr>
<td>Collinearity</td>
<td>70</td>
</tr>
<tr>
<td>Main Analysis</td>
<td>70</td>
</tr>
<tr>
<td>Adjusting for Covariates</td>
<td>71</td>
</tr>
<tr>
<td><strong>5 DISCUSSION</strong></td>
<td>79</td>
</tr>
<tr>
<td>Post-deployment Adjustment</td>
<td>79</td>
</tr>
<tr>
<td>Role of Resilience and Post-deployment Social Support in Adjustment</td>
<td>80</td>
</tr>
<tr>
<td>Characteristics of the Transition and Adjustment</td>
<td>82</td>
</tr>
<tr>
<td>Other Factors and Post-deployment Adjustment</td>
<td>85</td>
</tr>
<tr>
<td>Limitations</td>
<td>86</td>
</tr>
<tr>
<td>Strengths</td>
<td>87</td>
</tr>
<tr>
<td>Suggestions for Further Study</td>
<td>88</td>
</tr>
<tr>
<td>Importance of This Work</td>
<td>88</td>
</tr>
<tr>
<td>Conclusion</td>
<td>91</td>
</tr>
<tr>
<td><strong>APPENDIX</strong></td>
<td></td>
</tr>
<tr>
<td>A PERMISSIONS AND ENDORSEMENTS OF SCALE MODIFICATIONS</td>
<td>92</td>
</tr>
<tr>
<td>B LETTERS OF SUPPORT</td>
<td>98</td>
</tr>
<tr>
<td>C PARTICIPANT STUDY INTRODUCTION INFORMATION SHEET</td>
<td>101</td>
</tr>
<tr>
<td>D SOURCES OF DEPLOYMENT INFORMATION</td>
<td>102</td>
</tr>
<tr>
<td>E MEASUREMENT INSTRUMENTS</td>
<td>103</td>
</tr>
<tr>
<td>F RECRUITMENT COORDINATOR TRAINING MANUAL</td>
<td>115</td>
</tr>
<tr>
<td>G DATA SAFETY MONITORING STUDY RISK ASSESSMENT</td>
<td>155</td>
</tr>
<tr>
<td>H ALTERNATIVE RECRUITMENT STRATEGY</td>
<td>156</td>
</tr>
<tr>
<td>LIST OF REFERENCES</td>
<td>160</td>
</tr>
<tr>
<td>BIOGRAPHICAL SKETCH</td>
<td>169</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>3-1</td>
<td>Study variables and measurement</td>
</tr>
<tr>
<td>3-2</td>
<td>Covariates and measurement</td>
</tr>
<tr>
<td>4-1</td>
<td>Study sample representativeness compared to total Navy force structure</td>
</tr>
<tr>
<td>4-2</td>
<td>Demographic characteristics</td>
</tr>
<tr>
<td>4-3</td>
<td>Military occupation support categories</td>
</tr>
<tr>
<td>4-4</td>
<td>Descriptives of continuous variables</td>
</tr>
<tr>
<td>4-5</td>
<td>Covariate and post-deployment adjustment Pearson’s Chi-square and Point-biserial correlations</td>
</tr>
<tr>
<td>4-6</td>
<td>Logistic regression 5 predictor model of post-deployment adjustment (N=130)*</td>
</tr>
<tr>
<td>4-7</td>
<td>Odds ratios for resilience and post-deployment social support scores increases and the corresponding odds of post-deployment adjustment</td>
</tr>
<tr>
<td>4-8</td>
<td>Logistic regression 7 predictor model of post-deployment adjustment (N=130)*</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>Conceptual model</td>
<td>24</td>
</tr>
<tr>
<td>3-1</td>
<td>Participant inclusion/exclusion screening flowsheet</td>
<td>64</td>
</tr>
</tbody>
</table>
### LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHC</td>
<td>Deployment Health Center</td>
</tr>
<tr>
<td>IA</td>
<td>Individual Augmentee (Service members who deployed with units other than their own)</td>
</tr>
<tr>
<td>MOS</td>
<td>Military Occupational Specialty</td>
</tr>
<tr>
<td>NAS JAX</td>
<td>Naval Air Station Jacksonville (Florida)</td>
</tr>
<tr>
<td>OEF</td>
<td>Operation Enduring Freedom-Afghanistan</td>
</tr>
<tr>
<td>OIF</td>
<td>Operation Iraqi Freedom</td>
</tr>
<tr>
<td>PDHA</td>
<td>Post-deployment Health Assessment</td>
</tr>
<tr>
<td>PDHRA</td>
<td>Post-deployment Health Re-assessment</td>
</tr>
</tbody>
</table>
DEFINITION OF TERMS

ADJUSTMENT. For purposes of this study, adjustment was defined as the human condition in which transitional experiences have been meaningfully integrated (cognitively and/or behaviorally) into one’s personal and social life and was evidenced by limited career, health, intimate relationship, social relationship, and stress reaction difficulties and few concerns about the deployment. Adjustment was measured on the Post-Deployment Readjustment Inventory (PDRI).

COMBAT EXPERIENCES. Combat experiences included exposure to stereotypical warfare experiences such as firing a weapon, being fired on, witnessing injury and death, and going on special missions that involved such experiences. Combat experiences were measured on the Combat Experiences subscale of the Deployment Risk and Resilience Inventory (DRRI).

DEPLOYMENT. Deployment is the relocation of service members to an operational area.

DEPLOYMENT ENVIRONMENT. The deployment environment included exposure to events or circumstances representing repeated or day-to-day irritations and pressures related to life in the war/deployment zone. These personal discomforts included the lack of desirable food, uncomfortable climate, cultural difficulties, inadequate equipment, and long workdays. The amount of exposure to a malevolent deployment environment was measured on the Deployment Environment subscale of the Deployment Risk and Resilience Inventory (DRRI).

INDIVIDUAL AUGMENTEE. An Individual Augmentee is a service member who deploys with a unit other than his/her own unit and sometimes with units in other branches of service.
LIFE EVENTS. Life events are situations (e.g. death of a spouse, divorce, birth of a child), both positive or negative, that have the potential to create stress because they require personal cognitive and/or behavioral adjustment. Life events were measured on the Holmes & Rahe (1967) Social Readjustment Rating Scale-Schedule of Recent Events (SRRS-SRE).

REDEPLOYMENT. Redeployment is the time following a deployment in which service members return home for reintegration and/or out-processing.

RESILIENCE. Resilience is a process that results in the ability to adjust (readjust) to adversity and life circumstances through the attainment of resilient qualities that serve as protective factors against life disruptions and distress (Richardson, 2002; Walsh, 1996; Rutter, 1985). Resilient qualities are individual characteristics including; 1) the ability to view change/stress as a challenge/opportunity, to remain committed (perseverant), and to recognize limits of situational control, 2) the ability to engage the support of others, to maintain close secure attachments, and pursue personal and collective goals, 3) the ability to maintain confidence in one’s effectiveness and to acknowledge the strengthening effects of stress and past successes, 4) the ability to maintain a sense of humor and action oriented problem solving approach, and 5) the ability to remain patient, tolerant of negative affect, and optimistic (Connor & Davidson, 2003; Haglund, Nestadt, Cooper, Southwick, & Charneya, 2007; Southwick, Vythilingam, & Charney, 2005). Resilience was measured on the Connor-Davidson Resilience Scale (CD-RISC).
SOCIAL SUPPORT. Post-deployment social support is the perception that family, friends, coworkers, leaders, and community provides emotional sustenance and instrumental assistance to the service member after returning home. Social support is the establishment and nurturance of a social network that functions by providing supportive others to encourage perseverance by counteracting feelings of loneliness and providing a sense of safety through the presence of stable, reliable interpersonal connections (Charuvastra & Cloitre, 2008; Haglund et al., 2007). Post-deployment social support was measured on the Post-Deployment Social Support subscale of the Deployment Risk and Resilience Inventory (DRRI).

TENANT COMMAND. A tenant command is a unit that is located on a military base but is not part of that base’s chain of command.
THE ROLE OF RESILIENCE AND SOCIAL SUPPORT IN PREDICTING POST-DEPLOYMENT ADJUSTMENT IN NAVY PERSONNEL

By

Craig Andrew Cunningham

May 2012

Chair: Bryan A. Weber
Major: Nursing Sciences

For more than a decade, the U.S. Navy has supported an unprecedented high number of missions fighting the war on terrorism. Thus, well-adjusted personnel who maintain readiness to deploy and carry out these missions are paramount to national security. However, as many as 85% of redeployed service members experience adjustment difficulties in the short-term and 45% of those service members with short-term adjustment difficulties have persistent adjustment problems in the long term. This is a significant problem, since post-deployment adjustment difficulties can severely hamper the general health and wellbeing of service members, thereby, interfering with deployment readiness for future missions. Although little has been reported on post-deployment short-term adjustment, social support, resilience, and characteristics of the transition (e.g. combat, malevolent deployment environments, and additional stressful life events) have been identified as factors that influence long-term adjustment. However, research has only been carried out on service members two or more years after returning from deployment. Given the ongoing uncertainty of world affairs and the necessary readiness for rapid multiple deployments, short-term adjustment may be
central to service members’ deployment readiness, the Navy’s mission, and national security.

The purpose of this study was to determine if those factors identified as important for long-term adjustment predicted short-term (12 months or less) adjustment among service members, after deployment; and to examine whether these factors predicted short-term adjustment when controlling for covariates (e.g. Individual Augmentee experience and perceived threat while deployed).

One hundred and thirty-two service members between 3 to 6 months post-deployment completed anonymous surveys during a regular clinic visit at a deployment health center. Results of logistic regression indicated that greater resilience and post-deployment social support predicted greater post-deployment adjustment but deployment characteristics were not statistically significant predictors of post-deployment adjustment. Resilience and post-deployment social support remained significant predictors of post-deployment adjustment when controlling for covariates.

Resilience and post-deployment social support may be more important than characteristics of the deployment in predicting short-term post-deployment adjustment. Programs that increase resilience and post-deployment social support should be developed and tested.
CHAPTER 1
PROBLEM

Currently, it is estimated that 1.9 million service members have been deployed to Operations Iraqi Freedom (OIF) and Operations Enduring Freedom (OEF) in Iraq and Afghanistan (Institute of Medicine, 2010). The deployed personnel regularly faced dangers and/or the perception of threat (i.e. harm to oneself) associated with assignment in hostile territory, including becoming or witnessing the severely wounded, the dead and dying, and enduring life in malevolent surroundings (Institute of Medicine, 2010; Tanielian, 2008). Readiness measures for deployment included military training that prepared service members to be hypervigilant, to have instantaneous reactions in times of need, to be on constant high alert, suspicious of everyone outside of their immediate unit, and to suppress their emotions (Cantrell & Dean, 2005; Cantrell & Dean, 2007; Figley & Nash, 2007; Hart, 2000; Ruzek, Schnurr, Vasterling, & Friedman, 2011; Slone & Friedman, 2008). However, no training prepared service members to alter their patterns of behavior and self-protective measures (i.e. adjustment) during the transition when they returned home to the U.S. (Booth-Kewley, Larson, Highfill-McRoy, Garland, & Gaskin, 2010).

Post-Deployment Adjustment

When deployment ended and service members returned to the U.S., it was often the first opportunity the troops had to ‘let their guard down’ and to consider the stressful deployment life events that they endured, in a thoughtful manner (Adler, Bliese, McGurk, Hoge, & Castro, 2009; Figley & Nash, 2007; Slone & Friedman, 2008). At the same time they were expected to adjust from a hostile environment and a ‘battlemind’ way of thinking and behaving to the safety of a homeland environment and way of
thinking and behaving that represented a return to “normal” everyday life (Figley & Nash, 2007; Slone & Friedman, 2008).

It was common for Operation Iraqi Freedom and Operation Enduring Freedom (OIF/OEF) military personnel who were low in resilience and low in social support (Pietrzak et al., 2010) to maintain combat or mission oriented thoughts, beliefs, and behaviors (e.g. hypervigilence, emotional suppression, suspicion, avoidance) that negatively impacted their daily routines, sleep, work and interpersonal roles and relationships (Bowling & Shermian, 2008; Ruzek et al., 2011). Hence, many were unable to adjust to their secure homeland environment which interfered with their career, physical health, intimate and social relationships (Katz, Cojucar, Davenport, Pedram, & Lindl, 2010). To the contrary, service members who returned from deployment and were high in resilience and who showed a tendency to seek out or construct social supports were able to make the required homeland transitional adjustment with few difficulties (King, King, Foy, Keane, & Fairbank, 1999; King, King, Vogt, Knight, & Samper, 2006; Pietrzak, Johnson, Goldstein, Malley, & Southwick, 2009; Pietrzak et al., 2010; Sharkansky et al., 2000). However, research in the area of post-deployment resilience and social support has only been carried out on veterans two or more years after returning from deployment (King et al., 2006; Pietrzak et al., 2009; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Thus, the effect of resilience and social support as protective factors against adjustment difficulties is not known among recently redeployed service members (those who have returned home for reintegration following a deployment).
Study Purpose

The main purpose of this study was to determine if resilience, social support, and characteristics of the transition (e.g. combat exposure, malevolent deployment environment exposure, and additional stressful life events) predicted short-term (12 months or less) adjustment among service members after deployment. It was hypothesized that service members with high resilience, high social support, and low exposure to combat, malevolent deployment environments, and additional stressful life events would have greater post-deployment adjustment.

The secondary purpose of this study was to examine whether resilience, social support, combat exposure, malevolent deployment environments, and additional stressful life events predicted short-term adjustment among service members after deployment when controlling for Individual Augmentee (IA) experience, military occupational specialty (MOS), gender, marital status, number of land-based deployments, and perceived threat while deployed. It was hypothesized that service members with high resilience, high social support, and low exposure to combat, malevolent deployment environments, and additional stressful life events would have greater post-deployment adjustment after controlling for Individual Augmentee (IA) experience, military occupational specialty (MOS), gender, marital status, number of land-based deployments, and perceived threat while deployed. Understanding factors that predict successful post-deployment adjustment is paramount to operational readiness.

Significance to Navy Nursing

The primary mission of Navy Nursing is to ensure operational readiness of its fighting force. The U.S. Navy is currently the smallest it has been since World War I —
yet it is called upon to respond to more diverse and hostile missions now than at any other time in history. Navy personnel historically supported both sea and ground operations in a variety of wars (e.g. WWI, WWII, Korea, Vietnam, and Gulf War I) as well as responded to natural disasters (e.g. Hurricane Katrina Relief and Earthquake Relief in Greece and Haiti). The ongoing wars in both Iraq and Afghanistan, the additional political instabilities in several other world regions (e.g. North Korea, China, and Africa), and the response to simultaneous natural disasters at home and abroad have required a high operational tempo that is unlikely to change in the near future. Thus, the Navy needs a ‘ready’ fighting force in order to sustain its high rate of operational deployments (the relocation of forces to operational areas).

Those who have redeployed (returned home for reintegration and/or out-processing following a deployment) represent more than 64% of Navy personnel and 40% of the redeployed are currently on their second or greater deployment (Institute of Medicine, 2010; Tanielian, 2008). Thus, the prospect of future and multiple deployments is high making rapid adjustment crucial (Doyle & Peterson, 2005). Identifying protective factors against short-term adjustment difficulties and identifying service members most at risk for adjustment difficulties is central to operational readiness.

**Conceptual Framework**

**Adjustment to Transitions**

According to Schlossberg’s (1981) Theory for Analyzing Human Adaptation (Adjustment) to Transition, a transition occurs if a stressful event results in an altered view of self and/or the world that requires a change in behavior and relationships. The stress associated with deployment to hostile territory is known to result in an altered
view of self and/or the world (Bragin, 2010). The typical adjustment period to stressful transitions lasts a few months (Bonanno, 2004; Litz, 2007; National Center for PTSD, 2005; Slone & Friedman, 2008). However, service members with inadequate environmental and individual resources and characteristics may have difficulty adjusting to the transition (i.e. integrating the necessary behavior and relationship changes into one’s life).

Schlossberg (1981) describes three major factors of transition. They are:

1. characteristics of the transition (i.e. stressful life events),
2. characteristics of the environment (e.g. social and institutional supports),
3. characteristics of the individual (i.e. resilience).

**Characteristics of the Transition**

Certain life events (e.g. death of a spouse, divorce, birth of a child) and/or the accumulation of multiple events may be a source of stress and vulnerability during the transition time period (Schlossberg, 1981). Moreover, memories and lasting impressions of exposure to combat and malevolent deployment living conditions compound the stress of transition for service members.

**Characteristics of the Transition Environment**

Transition environment refers to social support systems and the larger institutional support systems (i.e. occupational and community organizations) to which individuals can turn for help (Schlossberg, 1981). Schlossberg postulates that emotional sustenance and instrumental assistance gained from social support (e.g. family, friends, and peers) provide a sense of safety and counteract lonely feelings by instilling a sense of belongingness. Institutional support is the availability of resources that aid an individual in meeting transitional demands. Institutional supports are likely similar for active duty service members redeployed to the same military base.
**Characteristics of the Individual**

The third determinant of adjustment to transition is individual characteristics. According to Schlossberg (1981), cognitive and behavioral attributes that confer resilience can promote adjustment during transition. These attributes include an active coping orientation, a sense of situational control, optimism, high initiative, value-orientation and commitment, realistic goal setting, planful problem solving, and the capacity to enjoy success and learn from failure. Individuals high in resilience often view difficult life events as challenges to be mastered, seek the skills necessary to overcome adversity, are able to maintain emotional stability, and are not overly distressed by the common reactions to stressful situations.

Therefore, characteristics of the transition environment (i.e. social support) and characteristics of the individual (i.e. resilience) can serve as protective factors during transition. Figure 1-1 depicts Schlossberg’s model for analyzing human adjustment to transition as it relates to redeployed military service members.

**Research Questions and Hypotheses**

Do Characteristics of the Transition (combat exposure, malevolent deployment environment, and stressful life events), a Characteristic of the Environment (post-deployment social support), and a Characteristic of the Individual (resilience) predict adjustment in Navy personnel redeployed from land-based assignments? Hypothesis #1a: Service members with high resilience and high social support would have greater post-deployment adjustment. Hypothesis #1b: Service members with low exposure to combat, malevolent deployment environments, and additional stressful life events would have greater post-deployment adjustment.
Do Characteristics of the Transition, a Characteristic of the Environment, and a Characteristic of the Individual predict adjustment in post-deployed Navy personnel when controlling for Individual Augmentee (IA) experience, military occupational specialty (MOS), gender, marital status, number of land-based deployments, and perceived threat while deployed? Hypothesis # 2: Service members with high resilience, high social support and low exposure to combat, malevolent deployment environments, and additional stressful life events would have greater post-deployment adjustment after controlling for Individual Augmentee (IA) experience, military occupational specialty (MOS), gender, marital status, number of land-based deployments, and perceived threat while deployed.
Figure 1-1. Conceptual model

- Characteristics of the Transition
- Malevolent Deployment Environment
- Combat Exposure
- Life Events

- Characteristic of the Environment
- Post-deployment Social Support System

- Characteristic of the Individual
- Resilience

Transition Adjustment
CHAPTER 2
LITERATURE REVIEW

Deployment Experiences

The attack on the World Trade Center on September 11, 2001 initiated the Global War on Terrorism (GWOT). Since that time, all land-based military missions in foreign countries have been conducted in environments that are considered hostile given the exposure service members have to combat (Kaylor, King, & King, 1987), malevolent environments (King et al., 1999), and the common perception that is associated with fighting a war related to the threat to life or limb (Wolfe, Proctor, Davis, Borgos, & Friedman, 1998). Military personnel who deploy in support of these missions do so in one of two ways, with their units or as Individual Augmentees (IAs) with units other than their own, sometimes in other branches of service. For most, the benefit of deploying with one’s unit brings along a predetermined support system which will share and understand the deployment experience. However, IAs are faced with the additional challenge of developing a support system within their newly assigned unit.

Despite how service members deploy (i.e. with their unit or as IAs), all are required to adjust to hostile circumstances by remaining focused on the mission and by maintaining hypervigilence. Moreover, basic military warfare training and equipment on which service members rely provides them with the necessary skills and armament to perform their duties and survive. However, the training and armament includes reminders of constant danger such as locating and killing the enemy, protection from being shot by the use of bullet proof vests, protection from blasts and mortar attacks by the use of Kevlar helmets and bunkers, and loaded weapons that are carried 24 hours-a-day. Even within the relative safety and security of a U.S. controlled base “inside the
wire” — personnel must be ready to fall to the ground when sirens sound signaling incoming mortar shells, manage exposure to enemy prisoners who continue to launch assaults (e.g. physical biting or throwing of human excrement), and protect themselves from the local law enforcement and/or military allies who frequently turn against U.S. service members. Service members performing confrontational duties (i.e. combatants) and non-confrontational duties (e.g. supply technicians and medical personnel) in a hostile environment share many of the same experiences and life threatening stressors that include separation from family and friends, dangerous environments, continual fear or hypervigilence, and anticipation of the next attack (King, King, Gudanowski, & Vreven, 1995; King et al., 1999; Slone & Friedman, 2008). Exposure to the dead and severely wounded reinforces the consequences of letting down one’s guard.

When properly trained, the focus on the mission and accompanying hypervigilence becomes embedded in deployed service members’ character and persona. Thus, it is not surprising that upon returning home many service members experience difficulties adjusting in both the short- (within the first 12 months) and long-term (greater than 12 months) to a safe non-hostile environment and nonthreatening homeland way of life that seems unfamiliar (Figley & Nash, 2007). There are several reasons for adjustment difficulties that extend beyond suddenly being thrust into an unfamiliar environment, albeit a safe environment in one’s homeland surrounded by loved ones. Service members experience redeployment preparations that do not rival preparations for deployment, service members report returning to altered home life, altered work life (e.g. decreased work challenges, an environment lacking activity), altered purpose, and
altered support networks — many of which no longer understand the service member or their experiences (Johnson et al., 1997).

**Deployment and Redeployment Preparations**

**Deployment Preparations**

Basic and pre-deployment military training is competency-based and a continual part of the military life with multiple weeks to months of intensive training upon enlistment, upon assignment to a specific military occupation, and immediately prior to a deployment (Adler, Bliese, & Castro, 2011; Cantrell & Dean, 2005; Cantrell & Dean, 2007; Figley & Nash, 2007; Hart, 2000; Institute of Medicine, 2010; Ruzek et al., 2011). Training includes use of weaponry, proper fitting and use of personal protective equipment designed for the anticipated hostile and threatening environmental exposures (e.g. climates, harmful chemicals, biological and environmental agents, and the type of weapons and tactics that the enemy will likely use), local customs, and disease vectors common to the deployed location, basic medical first aid, and how to recognize a stress reaction in a comrade. In addition, role playing in simulated and stressful situations that resemble the deployment environment are frequently used to promote skill development. Practice proceeds until service members can respond instinctively and display a competency for performing the necessary skills with a focus on completing the assigned mission-driven task.

**Redeployment Preparations**

Redeployment training varies with each branch of the service but is largely psycho-educational and involves sharing of information related to manifestations of adjustment difficulties and where to go for assistance (Institute of Medicine, 2010; Martin, 2007; National Center for PTSD, 2005; Ruzek et al., 2011; Slone & Friedman,
Computer-based modules and instructor-led lectures are common strategies for this type of training. Redeployment training, which often occurs in the deployment theatre (while service members are still confronted with hostile circumstances) and during the early redeployment time period (i.e. first month after returning home), is tailored to provide information designed to aid the redeployed service member to predict potential challenges during reintegration (Adler et al., 2011; Martin, 2007). However, competency-based training that service members receive in preparation for deployment and the preparation for redeployment are vastly different in comparison. Redeployment preparation does not include the same type or level of preparation (Adler et al., 2011; Bowling & Shermian, 2008; Institute of Medicine, 2010; Ruzek et al., 2011). For example, the breadth and depth of the curriculum and simulation of redeployment stressors is not provided to service members. Thus, developing the skills necessary to adjust successfully to redeployment is not structured the same as deployment preparations and organized opportunities to practice letting one’s guard down, talking about one’s experiences, learning to handle one’s emotions, etc., are not readily available.

There are individual differences in how service members use the information provided to them related to redeployment adjustment (Institute of Medicine, 2010; Litz & Roemer, 1996; Litz, 2007; Litz, 2004). For individuals high in resilience, information about what to expect during redeployment may be sufficient as these individuals likely use this information in order to develop the necessary skills for dealing with reintegration challenges. However, informational support may not be as effective for service members low in resilience and without the social support found to be effective in
facilitating adjustment (Sayers, Farrow, Ross, & Oslin, 2009; Shea, Vujanovic, Mansfield, Sevin, & Liu, 2010).

**Post-deployment Adjustment**

Post-deployment adjustment refers to the condition in which transitional experiences have been meaningfully integrated into one’s personal and social life related to career, health, intimate and other social relationships, and absence of stress reactions associated with preoccupying concerns about the deployment (Bowling & Shermian, 2008; Katz et al., 2010; Slone & Friedman, 2008). Learning to adjust to changes in health status, household and work roles, and relationship expectations is not easy because it requires the service member to incorporate new knowledge or experiences and to regulate behavior while simultaneously working to reestablish one’s place within a social network (Meleis, 2007). Aberrations in adjustment occur when service members have difficulty making the redeployment transition and have persistent hypervigilence, constriction of emotion, and difficulty reestablishing social connections.

As many as 85% (Shea et al., 2010) of redeployed service members experience adjustment difficulties in one or more personal or professional areas in the short-term and 45% of those service members with short-term adjustment difficulties have persistent adjustment problems in the long-term (i.e. greater than 42 months) (Sayer et al., 2010). The inherent significance of adjustment difficulties is the profound and negative effect it has on relationships, productivity, and the ability and readiness to carry out one’s military duty. Post-deployment adjustment requires redefining family and work roles and expectations, renegotiating division of labor, recreating intimacy, and attempting to create shared meaning of the experience with loved ones and comrades who did not deploy (Bowling & Shermian, 2008).
Altered Home Life and Support Network

One of the greatest challenges reported by redeployed service members is an altered home life (Doyle & Peterson, 2005). Redeployed service members indicate they feel like guests in their own home (Sayers, Farrow, Ross, & Oslin, 2009). This guest-like perception may be due to changes (alterations) that took place in the service member’s home life and support network during deployment (Brenner et al., 2008; Gambardella, 2008; Slone & Friedman, 2008). For example, deployed service members who married shortly prior to deployment and/or left a pregnant wife behind (a common occurrence) may have missed the birth of children, still others were absent for family traumas and triumphs and other life events that could only partially be shared through phone, email, or written letters (Doyle & Peterson, 2005; Johnson et al., 1997; Yerkes & Holloway, 1996). Some service members return to marriages that do not survive deployment and they face marital separation/divorce. Another common occurrence is the return to marriages and/or family situations in which service members feel less valuable and unsure about their family roles, since the family seemed to get along fine in the service member’s absence while deployed. In these situations, parents, spouses, siblings, children, significant others, and close friends assumed responsibilities that were previously performed by the deployed service member. When the redeployed service member exerts a claim to prior responsibilities, those who assumed the added responsibilities are often left feeling that their efforts during deployment are devalued or they may be reluctant to relinquish the role they found to be rewarding and boosting to their self-esteem (Doyle & Peterson, 2005; Gambardella, 2008). In contrast, other spouses expect the redeployed service member to resume their prior responsibilities and roles immediately upon returning — which can be
overwhelming given the often linear simplified nature of deployment life (Slone & Friedman, 2008). All of these scenarios reflect incongruence between the service member and their social network. The incongruence can lead to feelings of misunderstanding and resentment, interfere with reestablishment of intimacy and trust, and create or lead to social isolation (Brenner et al., 2008).

**Altered Work Life and Support Network**

During the service member’s absence, changes likely took place in the military home-base work environment, since non-deployed personnel continued to move (i.e. permanent change in station [PCS]) from one base to another — which occurs even during war time. Commands come under new leadership as commanding officers and unit (department) leaders are reassigned, equipment is constantly updated and changed, and personnel are changed as a result of regular PCS moves and rolling deployments. Hence, it is common for the returning service member to find a stranger performing the duties (s)he once performed. Thus, the redeployed service member is faced with meeting new people, having to adjust to new and unfamiliar roles, and perhaps navigating a new working environment.

Adjusting to the altered home-based work environment is further complicated for service members who deployed as Individual Augmentees. Individual Augmentees typically redeploy alone back to their parent command without the presence of supportive comrades who shared the same deployment experiences which can interfere with the closeness and bonds that service members have with each other (Blais, Thompson, & McCreary, 2009; Charuvastra & Cloitre, 2008; Figley & Nash, 2007; Guay, Billette, & Marchand, 2006). Divergent deployment experiences may result in
fewer sources of post-deployment support from comrades and contribute to a belief that no one understands or appreciates what the service member has experienced.

**Post-deployment Adjustment Assistance**

Current interventions to aid with redeployment adjustment include 1) screenings to identify those who have psychopathological adjustment problems (e.g. PTSD, Major Depression) and referring them to medical and behavioral health specialists (e.g. psychiatrists, psychologists, social workers, psychiatric nurses)(Martin, 2007), 2) self-referral resources such as Military One-Source which coordinates and provides individual and family counseling, 3) self-help programs (e.g. Vet 4 Vet groups, Vets Prevail—online support group), and 4) more recent prevention efforts that include programs such as Navy Operational Stress Control (OSC)(Ruzek et al., 2011).

The OSC program is grounded in promoting self-care (e.g. good sleep, fitness, eating habits, maintaining a sense of humor, positive attitude and social connections), and early detection of stress reactions in fellow comrades. It includes an implied duty of each service member to encourage their stress-reacting comrade to seek appropriate care (Ruzek et al., 2011). The OSC program is believed to contribute to resilience building (Bowles & Bates, 2010) among Sailors and Marines by providing informational support. However, it was not designed to predict which service members will engage in good self-care practices and there is no empirical evidence to date that suggests resilience is related to short-term post-deployment adjustment, despite its relationship to long-term adjustment.

**Resilience, Social Support, and Sojourner Studies**

Post-deployment adjustment involves successful adaptation and positive functioning in meeting challenges and responding to changes in a social environment.
Most current knowledge on the topic of the adjustment process comes from studies conducted on post-deployed military populations two or more years after redeployment and, thus, describes adjustment in the long-term (King et al., 1999; King, Taft, King, Hammond, & Stone, 2006; King et al., 2006; Waysman, Schwarzwald, & Solomon, 2001). Service members with long-term adjustment difficulties tend to be low in resilience, have had high exposure to combat, malevolent deployment living conditions and/or additional stressful life events, and have inadequate social supports (Kessler et al., 1995; King et al., 2006; Pietrzak et al., 2009; Pietrzak et al., 2010; Sharkansky et al., 2000). Pietrzak and colleagues (2009) postulate that long-term post-deployment adjustment is related to and can be predicted by resilience and social support. Others hypothesize that resilience and social support may also play a significant role in how a person adjusts in the short-term (Charuvastra & Cloitre, 2008; Haglund et al., 2007).

**Resilience**

Resilience represents the personal qualities that enable one to adjust to life circumstances such as personal competence, high standards, and tenacity, tolerance of negative affect and viewing stress as strengthening, positive acceptance of changes, personal control, and spiritual orientation to the future (Connor & Davidson, 2003; Richardson, 2002). Individuals high in resilience tend to view difficult life events, such as adjusting during redeployment, as challenges to be mastered. Consequently, individuals high in resilience seek the skills necessary to overcome adversity, believe that they can elicit control over difficult situations (i.e. have choices), are able to maintain emotional stability, and are not overly distressed by common reactions to stressful situations (e.g. reexperiencing, intrusive thoughts, hyperarousal) (Connor & Davidson, 2003; Richardson, 2002). Thus, highly resilient service members would be
expected to have the necessary skills for dealing with current and future life stressors and be quick to adjust.

**Social Support**

According to King et al. (2006), socially supportive factors include having someone available with whom to talk, feeling understood and appreciated by others, and having others available to provide practical assistance. Having these supportive factors in place was shown to be a protective factor against long-term post-deployment adjustment difficulties in Vietnam Veterans (King et al., 1999), Gulf War Veterans (King et al., 2006), prisoners of war (Engdahl, Dikel, Eberly, & Blank, 1997), United Nations Soldiers (Kaspersen, Matthiesen, & Gotestam, 2003), and Operation Enduring Freedom and Operation Iraqi Freedom Veterans (Pietrzak et al., 2009). Service members who had returned from deployments to Iraq and Afghanistan two years earlier who endorsed adequate social support reported significantly fewer long-term adjustment difficulties (e.g. problems at work, family problems, and problems with friends and peers). However, little is known about the effect of social support and how it relates to short-term adjustment among recently redeployed service members (Blais et al., 2009; Bowling & Shermian, 2008; Katz et al., 2010; MacDermid Wadsworth, 2010).

**Sojourner Studies**

Since little is written on the positive effects of resilience and social support on short-term redeployment adjustment, a review of Sojourner studies was conducted. Consistent with redeployed service members, many Sojourners indicate that the transition back to one’s country of origin (repatriation) is difficult (Furukawa, 1997) and that as many as 70% of repatriates experience significant short-term adjustment difficulties (Black, Gregersen, & Mendenhall, 1992). The process of repatriation
adjustment can cause arousal, stress, trouble concentrating, irritability, and anxiety (Stringham, 1993; Sussman, 2000). However, as hypothesized among redeployed service members, repatriated Sojourners who are high in resilience and have adequate social supports tend to adjust well in the short-term and report few work and interpersonal adjustment difficulties (Herman & Tetrick, 2009; Sussman, 2001; Sussman, 2002; Szkudlarek, 2010). The Sojourner literature adds to the argument that adjustment can be a source of stress and that resilient qualities and adequate social support are related to fewer short-term adjustment difficulties.

**Summary of Problem**

Service members commonly experience short-term redeployment adjustment difficulties during redeployment transition (Shea et al., 2010) and little is known about the process of redeployment short-term adjustment (Blais et al., 2009; Bowling & Shermian, 2008; Katz et al., 2010; MacDermid Wadsworth, 2010). There is evidence that redeployment adjustment difficulties in the short-term may progress to adjustment difficulties in the long-term that can severely interfere with and hamper the general health and wellbeing of service members (Bryant, 2003; Sayer et al., 2010; Sayers et al., 2009; Thompson et al., 2004) and their readiness to deploy in support of future missions. Most research related to redeployment adjustment from the Global War on Terrorism (GWOT) has been conducted primarily on Army personnel (Hoge et al., 2004; Milliken, Auchterlonie, & Hoge, 2007) and focused on identifying those with PTSD or other psychiatric problems and may not generalize to other branches of service or to those service members experiencing adjustment difficulties but who do not have PTSD. No redeployment adjustment studies were located that focus on Navy personnel without PTSD even though redeployed service members without PTSD experience problems
related to social relationships and social and vocational engagement and productivity (Sayer et al., 2010).
CHAPTER 3
METHODS

Study Design

This descriptive study used a cross-sectional design to determine if resilience, social support, and transition characteristics (e.g. combat exposure, malevolent deployment environments, and/or additional stressful life events) predict short-term psychosocial adjustment in post-deployed service members. The results of this study were expected to provide evidence on which future interventions can be based to assist service members adjust to the psychosocial demands after returning from deployment.

Setting

Naval Air Station Jacksonville (NAS JAX) is a multi-mission base that houses the fourth largest naval hospital in the U.S., and hosts the operations of more than 100 tenant commands, each with its own reporting structure. These independent reporting structures along with deployment cycles that change in response to mission demands make it difficult to know the exact number of service members deployed at any given time. However, an estimated total of 2,400 service members from NAS JAX report to the Naval Hospital Branch Health Clinic annually prior to deploying to hostile conditions and/or territories including Iraq, Afghanistan, Djibouti, and Cuba. Although a small number of redeployed service members move to another base soon after returning from deployment, most service members who were deployed from NAS JAX redeploy back to NAS JAX.

Upon redeployment, service members are required to undergo physical and mental health screening by completing the post-deployment health assessment (PDHA) and the post-deployment health re-assessment (PDHRA) (Martin, 2007; Rona, Hyams,
& Wessely, 2005). Although flight surgeons provide these screenings in the field for personnel assigned to their unit, approximately 200 service members each month receive their psychological screenings through the NAS JAX Deployment Health Center (DHC) (a traditional medical clinic located in the Branch Health Clinic). The DHC conducts these screenings for service members redeployed from land-based operations. Shipboard post-deployment health screenings are conducted through a different venue. The sample in this study were service members recruited from the DHC at NAS JAX at the conclusion of the health screening that took place 90 to 180 days after redeployment.

**Sample**

Representativeness of the sample was based on the Institute of Medicine Report (2010) that indicated service members deployed (e.g. to OIF/OEF) are representative of the total Navy force structure. According to the most recent Institute of Medicine Report, 89% of those deployed to OIF/OEF are male, 66% are white, 16% black, 10% Hispanic, 4% Asian, and 4% other. The current demographic characteristics of the Navy consists of 88% enlisted, with 65% of the enlisted between the ages of 20-29 and 12% officer, the majority of whom are between the ages of 25-39. Approximately 55% of Navy personnel are married and 42.5% have children.

The way in which service members adjust during redeployment may vary based on hostile/combat exposure and sources of support while deployed. Given the diversity of the tenant commands housed at NAS JAX, Navy personnel stationed there serve in varied military occupational specialties (MOS). Participants in this study were assigned to a number of MOS’s that ranged from non-confrontational duties (e.g. cooks, electronics technicians, store keepers) to aviators (e.g. pilots and flight crew personnel)
and medical occupations (e.g. corpsmen, nurses, doctors). Thus, exposure to hostile/combat situations and environments was expected to vary among participants, which may have had a profound effect on redeployment adjustment. Moreover, it was common (during the current conflicts) for naval personnel to deploy and redeploy as Individual Augmentees in the absence of comrades who shared the same deployment experiences. Despite the diversity of MOS’s or deployment experience as an IA, redeployment was expected to be a source of stress for service members. Therefore, all service members redeployed to NAS JAX who met inclusion criteria were eligible to participate in this study. Data was collected and analyzed to determine if MOS or IA status had an effect on study outcomes.

Inclusion Criteria

Since service members were required to complete their PDHRA between 90 and 180 days after redeployment, all active duty redeployed Navy personnel reporting to NAS JAX DHC for completion of their PDHRA were eligible to participate in the study. The population was selected since they were recently exposed to the stressors of land-based deployment operations and they faced the short-term psychological adjustment demands of reintegration, for which little is known. Service members completing their initial 30 day post-deployment health assessment were not selected because months one to three after returning from deployment represent a ‘honeymoon’ phase of reintegration — which was reported to interfere with participation and/or accurate reporting (i.e. failing to report or acknowledge difficulties because of a preoccupation with reuniting efforts with family and friends) (Hoge et al., 2004; Slone & Friedman, 2008).
Exclusion Criteria

Redeployed Navy personnel who receive their post-deployment health screenings at the DHC are those who have not suffered major physical injuries (i.e. amputations) or terminal illnesses and those who do not have current diagnosis of mental illness that would interfere with their ability to perform their assigned duties. For example, Navy personnel who suffered amputations, terminal illnesses, severe PTSD, or who were at risk of harm to self or others would have received their physical and psychological care directly through inpatient hospital facilities (e.g. Naval Medical Center Portsmouth, National Naval Medical Center in D.C., and Balboa Naval Hospital in San Diego). However, Navy personnel receiving their post-deployment health screenings at the DHC may have had undiagnosed PTSD, or traumatic brain injury and may have been experiencing new onset risk of harm to self or others — all of which may have confounded study outcomes — since these conditions will profoundly affect adjustment.

Thus, the exclusionary criteria were as follows:

1. Service members who screened positive on the Posttraumatic Stress Disorder Checklist-Military Version (PCL-M) (Bliese et al., 2008) for probable PTSD/probable TBI. Since both TBI and PTSD are defined in large part by the same self-reported symptoms (Hill, Mobo, & Cullen, 2009), the PCL-M was used to screen for probable PTSD and probable TBI. The PCL-M is part of the 90 to 180 day post-deployment health reassessment (PDHRA) interview conducted by the Navy at the DHC. Data from the PDHRA data collection form was reviewed to determine service members’ eligibility for this study and for the other exclusionary criteria. Using data collected by the Navy to determine eligibility for this study was expected to minimize study related participant burden.

2. Service members identified as posing a current risk of harm to self or others during the post-deployment health re-assessment interview.

Sample Size

There is limited information about the relationship between resilience and post-deployment adjustment and between social support and post-deployment adjustment in
military populations. However, Pietrzak et al. (2010) reported the moderate to strong relationships between resilience and post-deployment adjustment to be \( r = -.40 \) and social support and post-deployment adjustment \( r = -.53 \), explaining 16% and 28% of variance outcomes, respectively. According to Field (2006) and Meyers et al. (2006), these relationships represent medium to large effect sizes. G*Power 3.1.2 (Erdfelder, Faul, & Buchner, 1996; Faul, Erdfelder, Lang, & Buchner, 2007; Faul, Erdfelder, Buchner, & Lang, 2009) was used to calculate the sample size for a fixed linear multiple regression model (R2 deviation from zero) with 11 predictors (5 main predictors – resilience, social support, malevolent deployment environment, combat exposure, stressful life events and 6 control predictors – Individual Augmentee experience, military occupational specialty, gender, marital status, number of land-based deployments, and perceived threat while deployed) for this study. Conservatively using a medium effect size, an \( \alpha = .05 \), and a \( \beta = 0.20 \), a sample of 123 participants was needed for adequate power.

**Measurement**

**Demographic Variables**

(Permission to use copyright material was obtained and letters of permission appear in Appendix A) (Table 3-1). A 13-item investigator developed questionnaire was used to assess demographic data including age, gender, rank, education, ethnicity, military occupation, marital status, number of land-based deployments, length of most recent deployment, and the presence of an IA experience. Respondents were asked to provide responses related to their military service and their personal background. Items on the demographic questionnaire were based on Department of Defense (Martin, 2007; Rona, et al., 2005) post-deployment health assessment (PDHA) and post-
deployment health reassessment (PDHRA) screening surveys. The measure was expected to take 1 to 2 minutes to complete.

**Post-deployment Adjustment**

The Post-deployment Readjustment Inventory (PDRI) is a 36-item self-report measure on which respondents rated their agreement with how true were the items in 6 domains of functioning since returning from deployment (Career, Health, Intimate Relationships, Social readjustment, Concerns about deployment, and Stress symptoms). Items were rated on a 5-point Likert scale from 1-‘not at all’ to 5-‘extremely.’ All items were reverse scored and summed for a total score that could range from 36 to 180 with higher scores indicating greater post-deployment adjustment.

The PDRI was validated among a diverse sample of post-deployed men and women from OIF/OEF and it had high internal consistency (α = .97). Convergent validity with other measures of psychosocial adjustment difficulties was established (e.g. posttraumatic stress disorder inventory, PCL-M, r = .90 and the Brief symptom inventory, r = .82) (Katz et al., 2010). One item on the PDRI was modified from “Having difficulty finding a job” to “Having difficulty managing my job” in order to be relevant to the sample population of active duty military personnel. The original developer of the scale endorsed the use of the new wording (Appendix A). The instrument effectively measured patterns of readjustment difficulties for veterans who did not meet criteria for PTSD (Katz et al., 2010). Post-hoc item analysis was used to compare the modified measure to the original. In this sample, Cronbach’s α on the PDRI items was .961. The measure was expected to take approximately 5 minutes to complete.
Predictor Variables

Resilience

The Connor-Davidson Resilience Scale (CD-RISC 25) (Connor & Davidson, 2003) was used to measure resilience. The CD-RISC 25 is a 25-item inventory of resiliency characteristics or qualities across 17 domains of functioning (e.g. commitment, recognition of limits of control, viewing stress/change as a challenge/opportunity, tolerance of negative affect, etc.). Items were scored on a 5-point Likert scale from 0-‘not true at all’ to 4-‘true nearly all the time’ and were based on how resilient respondents felt over the past month. Item scores were summed to yield a total score that could range from 0 to 100 with higher scores indicating greater resilience. Pietrzak et al. (2009) validated the CD-RISC 25 with a diverse sample of post-deployed men and women from OIF/OEF and reported good reliability (α = .94). In this sample, Cronbach’s α on the CD-RISC 25 items was .931. The measure was expected to take approximately 4 minutes to complete.

Post-deployment social support

The Post-deployment Social Support Scale (PSSS) is a 15-item self-report measure that assesses post-deployment emotional support and instrumental assistance provided by family, friends, coworkers, employers, and community (King et al., 2006). Respondents indicated how much they agreed or disagreed with a set of statements related to social support after deployment. Items were rated on a 5-point Likert scale with responses that ranged from 1-‘strongly disagree’ to 5-‘strongly agree.’ One item was modified from “The people I work with respect the fact that I am a veteran” to “People in my community respect the fact that I am a service member” in order to be relevant to an active duty population. The original developers of this scale endorsed the
use of the new wording and think that it captures the intent of the construct being measured (Appendix A). Item scores were summed (reverse scoring items 6 & 8) and could range from 15 to 75 with higher scores indicating greater social support upon return from deployment. The measure was validated with OIF, OEF, and Gulf War veterans (King et al., 2006; Pietrzak et al., 2009; Vogt, Proctor, King, King, & Vasterling, 2008), and it had good reliability (α = .87). King (2006) reported responses to the PSSS were negatively related to measures of adjustment disorders and physical symptoms and were positively related to measures of physical, mental, and cognitive functioning. In this sample, Cronbach’s α on the PSSS items was .891. The measure was expected to take 2 to 3 minutes to complete.

**Deployment environment**

The Deployment Environment is a 20-item self-report measure that assesses exposure to events or circumstances representing repeated or day-to-day irritations and pressures related to life in the war zone (e.g. lack of desirable food, lack of privacy, poor living arrangements, uncomfortable climate, cultural difficulties, boredom, inadequate equipment, and long workdays) (King et al., 2006). Respondents indicated their extent of exposure (over the course of their entire deployment) on a 5-point Likert scale that ranged from 1-‘almost none of the time’ to 5-‘almost all of the time.’ Item scores were summed (reverse scoring items 3, 4, 7, 8, 10, 12, 13, 17, & 19) for a total score that could range from 20 to 100 with higher scores indicating greater exposure to difficult living and working environments. King (2006) reported the measure was moderately correlated with measures of psychosocial adjustment distress (e.g. PTSD r = .36, depression r = .30, & Anxiety r = .37) and has good reliability (α = .89). In this sample,
Cronbach’s α on the Deployment Environment items was .872. The measure was expected to take 2 to 3 minutes to complete.

**Combat exposure**

The Combat Experiences Scale - Modified (CES-M) is a 15-item self-report measure that assesses exposure to combat (e.g. firing a weapon and witnessing injury and death) and was used to measure another characteristic of the deployment environment (King et al., 2006; Vogt et al., 2008). Respondents indicated what amount of time they were exposed to combat conditions on a 5-point Likert scale that ranged from 1-'never' to 5-'daily or almost daily.’ Item scores were summed for a total score that could range from 15 to 75 with higher scores indicating greater frequency of combat exposure. Vogt et al. (2008) reported the CES-M had good reliability (α = .90). In this sample, Cronbach’s α on the CES-M items was .903. The measure was expected to take 2 to 3 minutes to complete.

**Life events**

The Social Readjustment Rating Scale - Schedule of Recent Experiences (SRRS-SRE) is a 43-item self-report measure that assesses exposure to life events that are commonly reported as stressful and that also require personal adjustment (Holmes & Rahe, 1967). Respondents were presented with a list of life events and were asked to indicate (by circling) which events occurred in the last 12 months. Each item had a weighted score that represents the relative level or degree of change required. Weighted scores from all circled items were summed for a total score that could range from 0 to 1466 with higher scores indicating greater exposure to stressful life events that require personal change. Hobson (1998) and Hobson (2001) have validated the measure in large national samples and consensus on the content listing of events and
the relative order and magnitude of the means of items is reported to be high, as evidenced by Pearson’s r >0.90 and Kendall’s coefficients of concordance (W) =0.4777 (p<0.0005) for discrete groups (e.g. male, female, single, married, age groupings, education level, social class, religion, generation, and Navy personnel)(Holmes & Rahe, 1967; Rahe, Mahan, & Arthur, 1970; Scully, Tosi, & Banning, 2000). The test-retest reliability coefficient in a military sample of Vietnam Veterans has been reported to be .85 (Watson et al., 1993). Additionally, Rahe et al. (1980) compared a group of Navy personnel from 1977 with a demographically matched group of men from the original 1967 study and reported Spearman rank order correlation between the mean rankings of the items to be .85 (p<.001). The measure was expected to take 2 minutes to complete.

Covariates

Rationale for covariates

Service member characteristics may not be comparable among participants and these differences were unavoidable given the convenience sampling strategy employed in this study. Thus, additional covariates were measured and accounted for in the regression equation to control for rival explanations of observed relationships and to reduce error variance of the independent variables on the study outcome that may have influenced post-deployment transitional adjustment. The covariates that were measured were selected because they represent factors that from a military standpoint were likely to be an added source of stress (Blais, Thompson, & McCreary, 2009; Charavastra & Cloitre, 2008; Figley & Nash, 2007; King et al., 2006; Street, Vogt, & Dutra, 2009; Litz, Figley & Nash, 2007; National Center for PTSD, 2008; Tanelien 2008; Vasterling, 2010) and included Individual Augmentee status, military occupational
specialty, gender, marital status, number of land-based deployments, and perceived threat while deployed.

**Covariate measures**

Individual Augmentee experience and gender were recorded as dichotomous variables. Marital status was recorded as a discrete numerical value that represented how participants classified themselves at the time of data collection (Table 3-2). Military occupational specialty was recorded as a discrete numerical value that corresponded to the Navy classification of military occupational specialties. It was anticipated that there would be approximately six MOS’s identified given the characteristics of personnel who typically complete their redeployment screening at the Deployment Health Center Naval Air Station Jacksonville. The number of land-based deployments was recorded as continuous data and perceived threat while deployed was measured using a single modified item extracted from the Deployment Risk and Resiliency Inventory (King et al., 2006) that asked participants to indicate on a 5-point Likert scale from 1-‘strongly disagree’ to 5-‘strongly agree’ the amount of agreement with the statement “There were moments during deployment when I thought/felt I was in great danger of being wounded or killed.” Many see being in danger as simply part of the job. Thus, the item was modified in such a manner that was believed to give permission to participants to normalize even passing experiences of perceived threat.

**Procedure**

**Recruitment**

Service members returning from deployment were required to undergo military physical and psychological screening at two time points (within 30 days and 90 to 180 days). The study sample was recruited from the DHC when service members reported
to complete the second of these two required post-deployment health screenings. This
time point and venue was selected for several reasons. The first reason relates to the
timing of the post-deployment health reassessment screening that coincides with the
time point when readjustment concerns begin to emerge at higher rates three to six
months after deployment (Milliken et al., 2007). Second, recruiting participants from the
DHC provided 1) a centralized location to access the post-deployed Navy personnel
assigned to the various tenant commands, 2) a location where service members
expected to discuss physical and behavioral health needs, 3) reduced risk to
participants by integrating study procedures into routine screening procedures already
being performed at the DHC, 4) medical and behavioral health resources in close
proximity in the unlikely event a participant had untoward reaction to study participation,
and 5) a location where service members did not have competing work demands.

All active duty Navy personnel completing their post-deployment health
reassessment were eligible for screening and inclusion in this study. Therefore, the
demographic characteristics of the sample population were expected to include gender
and minority representation that approximated the demographic characteristics of post-
deployed Navy personnel at NAS JAX (e.g. 89% male, 66% white, 16% black, 10%
Hispanic, 4% Asian, and 4% other).

**Recruitment Support**

Letters of support were obtained from the Division Officer of the Jacksonville Naval
Hospital Branch Health Clinics, the Department Head of the DHC, the Deployment
Health Psychologist and Program Manager at the DHC, and the Physician Assistant
(PA) responsible for conducting the PDHRAs (Appendix B - Letters of Support). A
waiver of HIPAA authorization was obtained from the University of Florida and the U.S.
Navy to review medical records necessary to determine those service members who met study inclusion/exclusion screening criteria.

The DHC Physician Assistant responsible for conducting the PDHRA interview agreed to be the recruitment coordinator for this study (Appendix B). The recruitment coordinator was trained to screen, recruit, and administer the study survey, thus blinding the investigator to the identity of participants and making this an anonymous survey. The recruitment coordinator had participated in conducting research at other medical treatment facilities and was familiar with the conduct of research in clinical settings. The recruitment coordinator was not a military service member, thus enhancing study protocol fidelity that was maximized since relocation of this person was unlikely during the study period. In the unlikely event the recruitment coordinator was no longer employed at the DHC, the Deployment Health Psychologist and Program Manager (who was also not a military service member and unlikely to relocate during the study period) agreed to support the utilization of another DHC staff member as a recruitment coordinator (Appendix B).

The advantages to utilizing the DHC staff as the recruitment coordinator included efficiency, minimizing disruption of the post-deployment screening process, and the ability for participants to remain anonymous to the investigator. Anonymity has been shown to increase research study participation in adult populations surveyed while waiting for clinic appointments (McPherson & Schwenka, 2004), during hospital admissions (Haas & Pazdernik, 2006), among military personnel during training (Trent, Stander, Thomsen, & Merrill, 2007), and among military personnel during the post-deployment readjustment period (Wright et al., 2005).
Screening and Recruitment Procedures

Screening for inclusion in the study and recruitment took place at the conclusion of the Navy mandated physical and psychological screening interview, which was recorded on DD FORM 2900 (PDHRA) and supplemented with the PCL-M form at the DHC. Responses on DD FORM 2900 and the PCL-M provided the interviewer with the necessary information to screen participants for study inclusion/exclusion. The recruitment coordinator (PA) viewed the forms but did not extract data to minimize the effort of the recruitment coordinator so as not to impact on her ability to complete her regular mission of identifying the physical and mental health needs of service members and referring them as necessary. Since the PA reviewed the information on the 2900 and the PCL-M as part of the PDHRA interview, the amount of additional time to screen and recruit for study inclusion was expected to average between 2 to 3 minutes per participant. The recruitment coordinator used the Participant Inclusion/Exclusion Screening Flow Sheet (Figure 3-1) to guide decisions on which service members met study inclusion/exclusion criteria. Service members who were excluded (e.g. those with probable PTSD and those identified as a current risk of harm to self or others) were referred for appropriate care per normal post-deployment screening procedures. Recruiting service members using this method was expected to lead to a representative sample of the target population and to recruit service members who met study inclusion/exclusion criteria (Butterfield, Yates, Rogers, & Healow, 2003).

Informed Consent

All service members who met inclusion criteria were provided with the participant information sheet (Appendix C) that contained a written description of the study including the study purpose, procedures, duration, risks, benefits, and the right to
withdraw at any time without penalty. They were also provided a list of deployment related resources (Appendix D), and a study packet that contained the study questionnaires (Appendix E). The recruitment coordinator was trained to respond to service members’ questions or concerns about the study. The investigator was available to the recruitment coordinator should there have been a question or concern that could not be addressed. Completing and returning the study questionnaires served as documentation of implied informed consent.

**Data Collection**

Once all questions and concerns were addressed, the recruitment coordinator escorted participants to a room that afforded privacy and showed them where to place the study packet when completed. Participants could then decide to complete the study packet or not complete the study packet and placed either the completed or the non completed forms in the locked file cabinet. The investigator collected completed surveys from the file cabinet at the end of each data collection day. This process continued until 123 participants who met inclusion criteria completed the survey.

**Participant Accrual**

It was difficult to estimate participation rates in this population. However, the typical response rate for similar mailed surveys in Navy personnel is about 17% (Woodruff & Conway, 1994). In this study, special efforts were employed such as face-to-face recruitment which has resulted in participation rates of 59% (Newby et al., 2005) to 93% (Katz et al., 2010). However, due to the wide range of reported participation rates, a conservative 59% participation rate was used to estimate participation rates in this study (Table 3-3). Thus, it was estimated that it would take approximately 3.6 months to screen 720 service members and recruit 123 participants into this study.
If by the end of the first month of data collection, 34 participants had not completed the survey, the PI was ready to consider recruiting the participants in person—given service members may respond more favorably to another service member’s request to participate. The private venue for service members to make the decision to participate or not participate would have been maintained in order to ensure that service members understood that participating was voluntary. The details of this plan are included in Appendix H. The PI realizes that this alternative strategy would not permit blinding of the researcher and complete anonymity. However, confidentiality could have still been maintained especially since no identifying information was included on any of the response forms.

Data Management

Statistical Package for the Social Sciences (SPSS)(v 16.0) was used for data management and analysis. A logbook was maintained to record data entry, coding, and cleaning decisions, such as, data modifications or transformations in order to facilitate data reviews (Schneider & Deenan, 2004).

Data coding

A code book was developed and used to organize data and to identify the coded data (e.g. variable placement in the dataset and codes and values associated with the variables). Completed questionnaires were assigned a unique case code number located in the coding column of each page which was used as the case number in the statistical software program during data entry and to facilitate correction of discrepancies (Schneider & Deenan, 2004). Missing data were deliberately coded during the data entry process (e.g. 9,99, or 999) as this is the preferred method of identifying missing data versus leaving the field blank (Findley & Stineman, 1989;
In order to minimize non-sampling error, the investigator coded all data directly on the data collection instrument and the coding was verified by a research assistant who was trained by the investigator.

**Data cleaning**

Data were cleaned by producing and analyzing frequency tables and box and whisker plots (Field, 2005; Roberts et al., 1997). A frequency table was used for all categorical variables to locate out-of-limit values and the original data collection questionnaire was checked to determine whether the error was a coding error or an entry error. For all variables measured at the interval level, box and whisker plots were used to identify outliers which were checked against the original data collection questionnaire to determine whether the outliers were coding errors, entry errors, or legitimate responses.

**Missing data**

All missing data values were checked for accuracy by returning to the original data collection instrument. Missing data was to be handled based on the percentage of total cases with missing data. Since the number of cases with missing data represented less than 5% of the cases, no imputations were performed. If, however, the number of cases with missing data was larger than 5%, cases would have been compared on demographic and main outcome variables to determine if there were any statistically significant differences between missing and non-missing data cases. If there was not a significant difference (at the .05 level of significance) between the groups, then the sample mean for the item would have replaced the missing value.

If there was a statistically significant difference between cases with and cases without missing values on the main outcome variable (post-deployment adjustment),
then regression imputation would have been utilized and results of the imputation would be compared with the results of the statistical analysis using only complete cases (Field, 2005). If the results of the statistical analysis with only complete cases were not similar to the statistical analysis including imputed cases, then a statistician would have been consulted to determine if an alternative imputation method would have been more appropriate.

Data entry

The standard structure for data entry (Portney & Watkins, 2009) was followed and each variable was entered in a separate column and each row represented only one individual participant. Data from the paper questionnaires was entered twice into two separate Excel spread sheets. The investigator entered the data into sheet 1 and a trained research assistant entered the data into sheet 2. The two spreadsheets were used to electronically compare the two data sets for accuracy of the entered data using the formula =F (sheet1!A1=sheet 2!A1,1,0) and values of 0 indicated on which data points the two sheets did not match. Discrepancies were printed and corrected by returning to the original paper document. Once all discrepancies had been corrected, the data were electronically read from the Excel document and saved into SPSS. The primary verified data set was used for analysis and the secondary data set was archived in case the primary data set became corrupt. Dual data entry provides 100% verification of the data (Cummings & Masten, 1994) and has been shown to be superior to other methods, such as reading aloud (Kawado et al., 2003), single entry, and visual checking (Barchard, Scott, Weintraub, & Pace, 2008).
Data Analysis

Preliminary analysis

A preliminary analysis was conducted to check for violations of statistical assumptions. The assumption of normal distribution of resilience, post-deployment social support, post-deployment adjustment, combat exposure, malevolent deployment environment exposure, and additional stressful life events was assessed by analyzing a histogram against the normal curve and a Shapiro-Wilks. Skewness and Kurtosis values that differed significantly from zero and a statistically significant Shapiro-Wilks, each at the .05 level of significance, was evidence of a possible univariate normality violation (Field, 2005). Continuous variables (e.g. resilience, post-deployment social support, and post-deployment adjustment) that were not normally distributed were transformed (i.e. logarithmic base 10 transformation). Bivariate scatter plots were analyzed to screen for curvilinear relationships between the predictor variables (e.g. resilience, social support, combat exposure, malevolent deployment environment exposure, and additional stressful life events) and the outcome variable (post-deployment adjustment). All non-linear relationships were transformed logarithmically. Extreme scores and standardized residuals were evaluated in the regression model (ZRE should not exceed ±1.96 or ±2.5 for more than 5% and 1% of the cases respectively). Influential extreme scores were identified by examining the DfBetas (DfBeta >1.0 were considered influential). The IV-IV bivariate correlations (Pearson r, r square >.8 indicated a concern that multicollinearity may have occurred) and the variance inflation factors (VIF >10 were considered evidence of a multicollinear relationship) were examined to determine if multicollinearity occurred. Multicollinear problematic variables were identified by obtaining the eigenvalue (eigenvalue >.5). A
null plot analyzing the constant variance of error term (residuals from the prediction line) across the levels of the outcome variable was planned to be used to check the assumption of homoscedasticity. However, the analysis plan (including the related assumptions) was modified due to non-normally distributed data (Chapter 4 for more on this issue). The assumption of linear relationships would have been further assessed by analyzing the null plot of the standardized regression predicted value against the standardized regression residuals and the partial regression plots of the IV-DV relationships controlling for the other IV. A histogram and a Shapiro-Wilks of the standardized residuals was planned to be analyzed for normality of the error term. The assumption of independence of error terms would have been checked by analyzing for patterns of the null plot and a Durbin-Watson (close to 2).

**Main analysis**

The main statistical analysis includes sample descriptions and regression analyses, including participation rates based on the percentage of service members who were invited to participate who actually completed the survey. The predictors (resilience, post-deployment social support, combat exposure, malevolent deployment environment, and additional stressful life events) and outcome variable (post-deployment adjustment) were examined using measures of central tendency, high and low range, and standard deviation. The demographic characteristics were examined for mode and frequency distribution. The plan was to run a linear regression model to examine how much variance (adjusted R square) in level of adjustment could be accounted for by resilience, post-deployment social support, combat exposure, malevolent deployment environment, and additional stressful life events. The plan also included examining the F-ratio for statistical significance p<.05. If the model was
statistically significant, the standardized beta coefficients would have been examined (t-test at the .05 level of significance $p<.05$) to determine significant individual variable contributions and their relative importance to predicting adjustment. However, assessment of the distributional status of the dependent variable revealed that it was not normally distributed even after applying a series of transformations. Therefore, the analysis was modified and Logistic Regression was employed (Chapter 4 for more on this issue).

**Adjusting for covariates**

A secondary analysis was performed to examine characteristics of the sample that significantly influenced the main outcomes. The covariates and the dependent variable (post-deployment adjustment) were entered into a correlation matrix to determine if they had a significant effect on adjustment. Those that were significantly related to adjustment were planned to be included in Step 1 of a regression equation. Step 2 would have included the main model predictors (resilience, social support, malevolent deployment environment, combat exposure, and additional stressful life events). However, the analysis was modified due to non-normally distributed data (Chapter 4 for more on this issue). The results of the linear regression model would have been examined to determine how much variance (adjusted $R^2$) in level of adjustment can be accounted for by resilience, social support, malevolent deployment environment, combat exposure, and additional stressful life events after controlling for significant covariates. The F-ratio would have been examined for statistical significance $p<.05$. If the model was statistically significant, the standardized beta coefficients would have been examined (t-test at the .05 level of significance) to determine significant individual variable contributions and their relative importance to predicting adjustment.
Protection of Human Subjects

Assurances

Institutional Review Board approval was obtained from the University of Florida and the Naval Medical Center Portsmouth (The primary approving IRB for the Southeast Region of Navy Medicine inclusive of Naval Hospital Jacksonville and its Deployment Health Center). The Naval Hospital Jacksonville and its branch health clinics (i.e. DHC) have current DoD Navy (federal wide) assurances (DoD-N40010) for engaging in human subject research. The rights and dignity of all subjects involved in this study were protected.

Informed Consent

A waiver of written informed consent was obtained from the University of Florida and Navy IRBs. Participants were given a complete written explanation (8th grade Flesch-Kincaid reading) of the research study purpose, time requirements, potential risks and benefits, and right to withdraw at any time (Appendix C). The Participant Study Information Sheet explained the anonymous nature of the study. Participants were given an opportunity to ask the recruitment coordinator study related questions. Participants were reminded that they could drop out at any time and this would not affect the care they receive at the NAS JAX DHC. Completing and returning of the study questionnaires served as implied consent.

Anonymous Participation and Anonymous Responses

Several procedures were implemented to protect the rights and dignity of human subjects involved in this research. Included were standardized training for the recruitment coordinator (Appendix F), easy access to the recruitment coordinator who was trained and available to answer questions about study participation, a private venue
in which participants were stationed for making the decision to participate and for data collection, and assurance of anonymous responses. Anonymous participation was maintained by allowing the service member to make the decision to participate or not participate after the recruitment coordinator had left the data collection room. There was no information collected that could tie participants to their responses, thus, ensuring anonymity. All questionnaires were placed in a sealed envelope by the participant in a locked file cabinet accessible only to the investigator.

**Burden and Risk**

The burden to human subjects was expected to be low. It was expected to take 18 to 22 minutes to complete the packet of study questions. Those service members invited to participate were expected to be at minimal risk (Appendix G) since they had completed screening for behavioral risk assessment and had not been identified as a potential harm to themselves or others and did not have probable PTSD. Those identified as having thoughts of harming themselves or others or with probable PTSD or probable traumatic brain injury were not included in the study to avoid unnecessary mental discomfort. In addition, the study did not include any experimental manipulation. The risks and side effects related to participating in this study were minimal and felt to be no greater than that encountered in “normal” day-to-day life. Although the risk of emotional upset was considered to be no more than minimal and similar to answering like questions posed by family or friends, participants may have been at-risk for emotional upset as a result of reading and answering questions about deployment/post-deployment experiences. Participants were instructed that they may feel free to decline to answer any questions. Moreover, a list of mental health resources was provided to all participants (Resources section below).
Resources

The investigator, a Masters prepared nurse, was available to the recruitment coordinator 24/7 during the study period. There was a plan in place to refer participants who expressed any untoward reaction to study participation to the Deployment Health Psychologist by the recruitment coordinator, located in the same hallway of the data collection site, for mental health counseling. However, none of the participants expressed any untoward reaction to study participation. A list of post-deployment related resources was given to each participant including local, state, and federal contact information (Appendix D).
<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Scale Type (Format)</th>
<th>Number of items</th>
<th>Participant Burden (in minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Characteristics</td>
<td>Investigator Developed Survey</td>
<td>Circle and fill in response</td>
<td>13</td>
<td>1-2</td>
</tr>
<tr>
<td>Post-deployment Adjustment</td>
<td>Post-Deployment Readjustment Inventory (PDRI)</td>
<td>5-point Likert 1-‘not at all’ to 5-‘extremely’</td>
<td>36</td>
<td>5</td>
</tr>
<tr>
<td>Resilience</td>
<td>Connor-Davidson Resilience Scale (CD-RISC 25)</td>
<td>5-point Likert 0-‘not true at all,’ to 4- ‘true nearly all the time’</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Post-deployment Social Support</td>
<td>Post-deployment Social Support Scale</td>
<td>5-point Likert 1-‘strongly disagree’ to 5- ‘strongly agree’</td>
<td>15</td>
<td>2-3</td>
</tr>
<tr>
<td>Deployment Environment</td>
<td>Deployment Environment Scale</td>
<td>5-point Likert 1-‘almost none of the time’ to 5 – ‘almost all of the time’</td>
<td>20</td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>Combat Experiences Scale</td>
<td>5-point Likert 1-‘never’ to 5- ‘daily or almost daily’</td>
<td>15</td>
<td>2-3</td>
</tr>
<tr>
<td>Life Events</td>
<td>Social Readjustment Rating Scale - Schedule of Recent Experiences</td>
<td>Circle Response</td>
<td>43</td>
<td>2</td>
</tr>
<tr>
<td>Covariate</td>
<td>Item</td>
<td>Response Format</td>
<td>Level of Measurement</td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>IA Experience</td>
<td>Did you deploy as an Individual Augmentee (IA) for your most recent deployment?</td>
<td>Yes/No</td>
<td>Dichotomous</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Your Gender?</td>
<td>Male/Female (circle)</td>
<td>Dichotomous</td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td>Which one of the following best describes your current marital status?</td>
<td>Single, never married, Married, Living with partner, Divorced, Separated, Widowed/Widower</td>
<td>Discrete categorical</td>
<td></td>
</tr>
<tr>
<td>MOS</td>
<td>What is your Military Occupational Specialty (MOS)?</td>
<td>Fill in</td>
<td>Discrete categorical</td>
<td></td>
</tr>
<tr>
<td>Number of land-based deployments</td>
<td>Number of land based deployments (including the most recent deployment)</td>
<td>(circle) 1, 2, 3, 4, 5, 6, 7</td>
<td>Continuous/Quantitative</td>
<td></td>
</tr>
<tr>
<td>Perceived threat while deployed</td>
<td>“There were moments during deployment when I thought/felt I was in great danger of being wounded or killed”</td>
<td>5-point Likert scale from 1-‘strongly disagree’ to 5-‘strongly agree’</td>
<td>Continuous/Quantitative</td>
<td></td>
</tr>
</tbody>
</table>
Table 3-3. Participant accrual estimates

<table>
<thead>
<tr>
<th>Sample Source Description</th>
<th>Estimate %</th>
<th>Monthly Estimate Participation Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redeployment assessments conducted at DHC monthly</td>
<td>60%</td>
<td>200</td>
</tr>
<tr>
<td>Estimated number of Active Duty Navy completing 90-180 day redeployment PDHRA screening.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected number who do NOT meet any exclusionary criteria (based on 17% estimates of post-deployed service members who have a mental health diagnosis or major physical injury) (Hoge, Auchterlonie, &amp; Milliken, 2006; Tanielian, 2008).</td>
<td>83%</td>
<td>59</td>
</tr>
<tr>
<td>Expected voluntary participation rate.</td>
<td>59%</td>
<td>34</td>
</tr>
</tbody>
</table>
Figure 3-1. Participant inclusion/exclusion screening flowsheet
CHAPTER 4
RESULTS

Well adjusted personnel who maintain readiness to deploy and carry out the Navy’s missions is central to national security. As many as 85% of redeployed service members experience adjustment difficulties which may severely interfere with the general health and wellbeing of service members and deployment readiness for future missions. Anonymous surveys were administered to Navy personnel, who had returned from a deployment within 3 to 6 months, in order to determine the role of resilience and social support in predicting short-term post-deployment adjustment.

Participation Accrual Rates

One hundred and forty-nine service members meeting inclusion/exclusion criteria presented to the deployment health center between August 12th, 2011 and December 23rd, 2011 and were invited to participate in this study. Of the 149 surveys that were returned, 11 were left completely blank, 4 were less than half complete, and 2 were mostly complete but were missing scores on the entire dependent variable (post-deployment adjustment) measure and were not useful for final analysis. Thus, 132 service members completed the survey for an 88.5% participation rate.

Sample Representativeness

To determine if the sample was representative of the total Navy force structure, the demographic characteristics of the sample were compared to the Institute of Medicine Report (2010) that described all service members deployed to OIF/OEF (Table 4-1). The sample in this study had a higher percentage of black (8%), female (7%), and officer representation (10%) than the total Navy force. Additionally, there were fewer enlisted service members (-19%) between the ages of 20 and 29 indicating
that the enlisted service members in this study were slightly older than the Navy force structure at the time.

**Demographic Characteristics**

Similar to the Navy force structure, the characteristics of the sample in this study were mainly white, married males (Table 4-2). The sample was highly educated, consisted mainly of enlisted personnel, and most had deployed for greater than 6 months to the Middle East. Just over one-half of the service members in the sample deployed as Individual Augmentees (with units other than their own). The ages of the sample ranged from 20 to 50 with a mean age of 32.56 (SD=7.03) years and the number of deployments ranged from 1 to 9 with a mean of 2.3 (SD=1.86) land-based deployments.

There were 35 Military Occupational Specialties represented in the sample. For purposes of data analysis, the Military Occupational Specialties were grouped into four categories according to similarity of supportive function; 1) Healthcare professions provide medical support to personnel, 2) Tactical and Operation professions directly carry out the war or contingency mission, 3) Equipment and Maintenance professions repair, maintain, and or operate machines, and 4) Personnel Support occupations focus on the personal and or administrative needs of the service members (Table 4-3 for each Military Occupation by support categories).

**Preliminary Analysis**

**Missing Values**

There were no missing values on any of the main variables. Of the covariates, there were three missing cases for Military Occupational Specialty representing 2.3% of the valid cases, two missing cases for number of deployments representing 1.6% of the
valid cases, and one missing case for gender, Individual Augmentee status, marital status, and perceived threat while deployed representing 0.8% of the valid cases for each variable. A total of 5 cases had missing values representing 3.8% of the sample.

Data Cleaning

There were no out-of-limit values identified during examination of box and whisker plots for the categorical variables. The outliers that were identified from box and whisker plots for the interval level variables were checked against the original data collection questionnaires and determined to be legitimate responses.

Variable Descriptives

See Table 4-4 for the mean, standard deviation, median, minimum, and maximum scores for the continuously measured variables. See Table 4-2 for the number (n) and percentage representation for the categorical variables.

Linear regression assumes that the dependent variable is normally distributed. Assessment of the distributional status of the dependent variable, post-deployment adjustment, revealed that it was not normally distributed (Skewness=-1.358, Kurtosis=1.189, and a Shapiro-Wilks = .825, p = .000). The distribution remained non-normally distributed after progressively removing up to 6 outliers. A series of data transformations including Logarithmic base 10, Inverse, Square root, Inverse Square root, and Logarithmic base 10 after anchoring the lowest score at 0 were unsuccessful in bringing the variable into normal distribution — as evidenced by Skewness and Kurtosis values greater than 1 and significant Shapiro-Wilks tests. Thus, logistic regression, which assumes a dichotomous dependent variable, was used to analyze the data.
First, normal Q-Q plots were examined to determine a cut-point for post-deployment adjustment. Post-deployment adjustment was dichotomized into low post-deployment adjustment and high post-deployment adjustment at the point in the middle of the S-curve where the observed value dipped below the expected normal value line on the Normal Q-Q Plot. Low post-deployment adjustment was defined as scores ranging from 36 to 137, (n=23, 18%) and high post-deployment adjustment was defined as scores ranging from 138 to 180, (n=107, 82%). To determine the adequacy of the dichotomization, residuals were reviewed. Points (i.e. cases) to which the model fit poorly were identified by normalized residuals, standardized residuals, and deviance values > $\pm$ 1.96. The Cook’ distances (values greater than 1) and leverage values (values greater than twice the mean leverage for all cases) were examined to determine if any of the cases with residuals > $\pm$ 1.96 were extremely influential and candidates for removal (Field, 2005). Examination of the residuals revealed 7 cases that the model fit poorly across all indices and 6 of these cases were influential. There were no inputting errors when the influential extreme cases were checked against the original data collection instrument. Removal of these cases resulted in little improvement in adequacy of fit of the model.

Therefore, a median split technique was used to dichotomize post-deployment adjustment into low post-deployment adjustment (scores ranging from 36 to 168) (n=64, 49.2%) and high post-deployment adjustment (scores ranging from 169 to 180) (n=66, 50.8%). To determine the adequacy of this dichotomization, residuals were again reviewed. Examination of the residuals revealed only 3 cases that the model fit poorly across all indices and none of these cases were influential (e.g. none of Cook’s
distances were greater than 1 and none of the cases with residuals greater than \( \pm 1.96 \) had leverage values greater than twice the mean). Therefore, the median split was used in the logistic regression. Marital status was dichotomized into married or living with partner versus single (never married), divorced, or separated. Three dummy variables were created for military occupation. The three dummy variables were 1) Military Occupation dummy grouping 1 (Healthcare support versus Equipment and Maintenance support, Personnel support – non healthcare, and Tactical and operations support), 2) Military Occupation dummy grouping 2 (Tactical and operations support versus Healthcare support, Personnel support – non healthcare, and Equipment and maintenance support), and 3) Military Occupation dummy grouping 3 (Personnel Support – non healthcare versus Healthcare support, Tactical and operations support, and Equipment and maintenance support) (Table 4-5).

Chi-square tests and Point-biserial correlations were used to determine the utility of covariates. Chi-square tests were performed between post-deployment adjustment and the dichotomous covariates (Individual Augmentee status, gender, marital status, military occupation grouping 1, military occupation grouping 2, and military occupation grouping 3) to determine if there was a relationship. Point-biserial correlations were performed between post-deployment adjustment and the quantitative covariates (number of deployments and perceived threat while deployed) to determine if there was a relationship. Two of the covariates had significant relationships with post-deployment adjustment (Individual Augmentee status, \( \chi^2 = 4.82, p < .05 \), and perceived threat while deployed, point-biserial correlation = \(-.287, p < .01\)) (Table 4-5). Therefore, Individual
Augmentee status and perceived threat while deployed were entered as covariates in the logistic regression model.

**Collinearity**

Before logistic regression, the independent variables (which were all continuous), significant continuous covariate (perceived threat while deployed), and significant dichotomous covariate (Individual Augmentee status) were entered into a linear regression analysis to examine multicollinearity statistics (Field, 2005). All of the bivariate correlations (Pearson’s r) between the independent variables were less than 0.8. All of the collinearity statistics tolerance values were greater than 0.1 and all of the Variance Inflation Factors (VIF) were less than 10. These indices did not meet the criteria for multi-collinearity (Field, 2005; Meyers, Gamst, & Guarino, 2006). Therefore, no variables were removed from the model.

**Main Analysis**

To determine if characteristics of the transition, characteristics of the environment, and characteristics of the individual predict adjustment, the 5 main predictor variables (resilience, combat exposure, malevolent deployment environment, stressful life events, and post-deployment social support) were logistically regressed on post-deployment adjustment. The set of predictors discriminated between those who had high post-deployment adjustment and those who had low post-deployment adjustment. The model was a statistically significant improvement over the constant-only model, \[ \chi^2 (5, \text{ N}=130) = 48.506, p < .001 \]. The Hosmer and Lemeshow Test was non-significant \[ \chi^2 (8) =8.766, p= .362 \], indicating that the predicted probabilities matched the observed probabilities. The Nagelkerke pseudo R² indicated that the model accounted for 41.5% of the total variance in post-deployment adjustment. Prediction success for the cases
used in the development of the model was relatively high, with an overall prediction success rate of 75.4% and correct prediction rates of 77.3% for service members with high post-deployment adjustment and 73.4% for service members with low post-deployment adjustment.

Resilience and post-deployment social support were statistically significant predictors of post-deployment adjustment with odds ratios of 1.05 to 1.07, respectively (Table 4-6). As resilience scores increased, the odds of post-deployment adjustment occurring increased with odds of 1.05 for an increase of 1 unit to 13.76 for a 57 unit increase in resilience (Table 4-7). As post-deployment social support scores increased, the odds of post-deployment adjustment occurring increased with odds of 1.07 for an increase of 1 unit to 13.64 for a 39 unit increase in post-deployment social support (Table 4-7). It is also worth noting that malevolent deployment environment approached significance (Wald= 3.669, p = .055) and may be a relevant predictor of post-deployment adjustment (i.e. reach significance) in a larger sample.

Adjusting for Covariates

In order to determine if resilience and post-deployment social support predict adjustment in post-deployed Navy personnel when controlling for significant covariates, Individual Augmentee status and perceived threat while deployed were added to the model. This model was a statistically significant improvement over the constant-only model, \( \chi^2 (7, N=130) = 53.151, p < .001 \). The Hosmer and Lemeshow Test was non-significant \( \chi^2 (8) =13.381, p= .099 \), indicating that the predicted probabilities matched the observed probabilities. The Nagelkerke pseudo R² indicated that the model accounted for 44.7% of the total variance in post-deployment adjustment. This suggests that the set of predictors continues to discriminate between those who had
high post-deployment adjustment and those who had low post-deployment adjustment. Prediction success for the cases used in the development of the model was relatively high, with an overall prediction success rate of 75.4% and correct prediction rates of 77.3% for service members with high post-deployment adjustment and 73.4% for service members with low post-deployment adjustment. Resilience and post-deployment social support remained statistically significant predictors of post-deployment adjustment with small increases in the odds ratios over the model without covariates (Table 4-8). Therefore, even when controlling for, Individual Augmentee status and perceived threat while deployed, as resilience and post-deployment social support increased the odds of post-deployment adjustment increased. Although this model, which adjusts for the covariates, was a statistically significant improvement over the constant-only model, none of the covariates were significant and their contribution did not improve upon the 5 predictor model.
Table 4-1. Study sample representativeness compared to total Navy force structure

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Navy*</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>89%</td>
<td>82%</td>
</tr>
<tr>
<td>Female</td>
<td>11%</td>
<td>18%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>66%</td>
<td>52%</td>
</tr>
<tr>
<td>Black</td>
<td>16%</td>
<td>25%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Asian</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Military Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enlisted</td>
<td>88%</td>
<td>78%</td>
</tr>
<tr>
<td>Age 20-29</td>
<td>65%</td>
<td>46%</td>
</tr>
<tr>
<td>Officer</td>
<td>12%</td>
<td>22%</td>
</tr>
<tr>
<td>Age 25-39</td>
<td>51%</td>
<td>54%</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>55%</td>
<td>56%</td>
</tr>
<tr>
<td>Single</td>
<td>45%</td>
<td>44%</td>
</tr>
</tbody>
</table>

*Percentages are from Institute of Medicine Report (2010)
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>(%)</th>
<th>Characteristic</th>
<th>n</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>Individual Augmentee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>106</td>
<td>(82.2%)</td>
<td>Yes</td>
<td>69</td>
<td>(53.5%)</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>(17.1%)</td>
<td>No</td>
<td>59</td>
<td>(45.7%)</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td>Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single, never married</td>
<td>28</td>
<td>(21.7%)</td>
<td>High school Graduate</td>
<td>25</td>
<td>(19.4%)</td>
</tr>
<tr>
<td>Married</td>
<td>72</td>
<td>(55.8%)</td>
<td>Technical school</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td>Living with Partner</td>
<td>5</td>
<td>(3.9%)</td>
<td>Some college (no degree)</td>
<td>41</td>
<td>(31.8%)</td>
</tr>
<tr>
<td>Divorced</td>
<td>19</td>
<td>(14.7%)</td>
<td>Associates Degree</td>
<td>22</td>
<td>(17.1%)</td>
</tr>
<tr>
<td>Separated</td>
<td>4</td>
<td>(3.1%)</td>
<td>Bachelors degree</td>
<td>20</td>
<td>(15.5%)</td>
</tr>
<tr>
<td>Widowed/Widower</td>
<td>0</td>
<td>(0.0%)</td>
<td>Graduate degree</td>
<td>19</td>
<td>(14.7%)</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td>Years of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>5</td>
<td>(3.9%)</td>
<td>12 years</td>
<td>34</td>
<td>(26.4%)</td>
</tr>
<tr>
<td>Black</td>
<td>32</td>
<td>(24.8%)</td>
<td>13-15 years</td>
<td>52</td>
<td>(40.4%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15</td>
<td>(11.6%)</td>
<td>16 or more years</td>
<td>37</td>
<td>(28.8%)</td>
</tr>
<tr>
<td>Native American</td>
<td>2</td>
<td>(1.6%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>67</td>
<td>(51.9%)</td>
<td>Deployment Length</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>(3.9%)</td>
<td>6 months or less</td>
<td>46</td>
<td>(35.8%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Greater than 6 months</td>
<td>81</td>
<td>(63.0%)</td>
</tr>
<tr>
<td>Military Rank</td>
<td></td>
<td></td>
<td>Military Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enlisted</td>
<td>100</td>
<td>(78.0%)</td>
<td>Healthcare</td>
<td>38</td>
<td>(29.5%)</td>
</tr>
<tr>
<td>Officer</td>
<td>28</td>
<td>(22.0%)</td>
<td>Tactical and Operations</td>
<td>19</td>
<td>(14.7%)</td>
</tr>
<tr>
<td>Deployment Location</td>
<td></td>
<td></td>
<td>Equipment/Maintenance</td>
<td>52</td>
<td>(40.3%)</td>
</tr>
<tr>
<td>Middle East</td>
<td>72</td>
<td>(55.8%)</td>
<td>Personnel Support</td>
<td>17</td>
<td>(13.2%)</td>
</tr>
<tr>
<td>Cuba</td>
<td>21</td>
<td>(16.3%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central/</td>
<td>18</td>
<td>(14.0%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South America</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>7</td>
<td>(5.4%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>(6.2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 4-3. Military occupation support categories

<table>
<thead>
<tr>
<th>Support Category</th>
<th>Military Occupation</th>
<th>n</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Support</td>
<td>Nurse</td>
<td>6</td>
<td>(4.7%)</td>
</tr>
<tr>
<td></td>
<td>Corpsman</td>
<td>25</td>
<td>(19.4%)</td>
</tr>
<tr>
<td></td>
<td>Physician Assistant</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td></td>
<td>Preventative Medicine</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td></td>
<td>Health Care Administrator</td>
<td>2</td>
<td>(1.6%)</td>
</tr>
<tr>
<td></td>
<td>Physician</td>
<td>3</td>
<td>(2.3%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>38</td>
<td>(29.6%)</td>
</tr>
<tr>
<td>Tactical and Operations Support</td>
<td>Logistics</td>
<td>2</td>
<td>(1.6%)</td>
</tr>
<tr>
<td></td>
<td>Air Crewman</td>
<td>4</td>
<td>(3.1%)</td>
</tr>
<tr>
<td></td>
<td>Intelligence</td>
<td>3</td>
<td>(2.3%)</td>
</tr>
<tr>
<td></td>
<td>Civil Engineer</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td></td>
<td>Pilot</td>
<td>3</td>
<td>(2.3%)</td>
</tr>
<tr>
<td></td>
<td>Flight Engineer</td>
<td>2</td>
<td>(1.6%)</td>
</tr>
<tr>
<td></td>
<td>Flight Officer</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td></td>
<td>Operations Specialist</td>
<td>2</td>
<td>(1.6%)</td>
</tr>
<tr>
<td></td>
<td>Communications</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>19</td>
<td>(14.9%)</td>
</tr>
<tr>
<td>Equipment/Maintenance Support</td>
<td>Aviation Mechanic</td>
<td>8</td>
<td>(6.2%)</td>
</tr>
<tr>
<td></td>
<td>Aviation Electrician</td>
<td>6</td>
<td>(4.7%)</td>
</tr>
<tr>
<td></td>
<td>Electronics Technician</td>
<td>12</td>
<td>(9.3%)</td>
</tr>
<tr>
<td></td>
<td>Equipment Operator</td>
<td>2</td>
<td>(1.6%)</td>
</tr>
<tr>
<td></td>
<td>Aviation Ordnance</td>
<td>2</td>
<td>(1.6%)</td>
</tr>
<tr>
<td></td>
<td>Weapons</td>
<td>2</td>
<td>(1.6%)</td>
</tr>
<tr>
<td></td>
<td>Aviation Technician</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td></td>
<td>Maintenance Chief</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td></td>
<td>Maintenance Officer</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td></td>
<td>Supply</td>
<td>5</td>
<td>(3.9%)</td>
</tr>
<tr>
<td></td>
<td>Information Systems Technician</td>
<td>3</td>
<td>(2.3%)</td>
</tr>
<tr>
<td></td>
<td>Police</td>
<td>6</td>
<td>(4.7%)</td>
</tr>
<tr>
<td></td>
<td>Boatswain's Mate</td>
<td>3</td>
<td>(2.3%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>52</td>
<td>(40.6%)</td>
</tr>
<tr>
<td>Personnel Support (non-healthcare)</td>
<td>Religious Programs Specialist</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td></td>
<td>Culinary Specialist</td>
<td>3</td>
<td>(2.3%)</td>
</tr>
<tr>
<td></td>
<td>Yeoman</td>
<td>2</td>
<td>(1.6%)</td>
</tr>
<tr>
<td></td>
<td>Officer Unspecified</td>
<td>4</td>
<td>(3.1%)</td>
</tr>
<tr>
<td></td>
<td>Administration (non-healthcare)</td>
<td>5</td>
<td>(3.9%)</td>
</tr>
<tr>
<td></td>
<td>Chaplain</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td></td>
<td>Photo Journalist</td>
<td>1</td>
<td>(0.8%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>17</td>
<td>(13.3%)</td>
</tr>
</tbody>
</table>
Table 4-4. Descriptives of continuous variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>(SD)</th>
<th>Median</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-deployment Adjustment</td>
<td>158.00</td>
<td>(24.75)</td>
<td>168.50</td>
<td>72.00</td>
<td>180.00</td>
</tr>
<tr>
<td>Resilience</td>
<td>79.57</td>
<td>(13.13)</td>
<td>81.00</td>
<td>43.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Combat Exposure</td>
<td>17.83</td>
<td>(6.03)</td>
<td>15.00</td>
<td>15.00</td>
<td>52.00</td>
</tr>
<tr>
<td>Post-deployment Social Support</td>
<td>60.16</td>
<td>(9.99)</td>
<td>60.50</td>
<td>36.00</td>
<td>75.00</td>
</tr>
<tr>
<td>Stressful Life Events</td>
<td>183.11</td>
<td>(113.73)</td>
<td>157.00</td>
<td>12.00</td>
<td>635.00</td>
</tr>
<tr>
<td>Malevolent Deployment Environment</td>
<td>46.17</td>
<td>(12.97)</td>
<td>46.00</td>
<td>20.00</td>
<td>79.00</td>
</tr>
<tr>
<td>Number of Deployments</td>
<td>2.30</td>
<td>(1.86)</td>
<td>2.00</td>
<td>1.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Perceived Threat While Deployed</td>
<td>2.22</td>
<td>(1.45)</td>
<td>1.00</td>
<td>1.00</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Table 4-5. Covariate and post-deployment adjustment Pearson’s Chi-square and Point-biserial correlations

<table>
<thead>
<tr>
<th>Post-deployment Adjustment</th>
<th>IA</th>
<th>Gender</th>
<th>Marital Status</th>
<th>MO1</th>
<th>MO2</th>
<th>MO3</th>
<th>NOD</th>
<th>PTHRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td></td>
<td></td>
<td></td>
<td>.073</td>
<td>2.831</td>
<td>1.649</td>
<td>.275</td>
<td>.223</td>
</tr>
<tr>
<td>Point-biserial correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01
IA = Individual Augmentee status; MO1 = Military Occupation dummy grouping 1 (Healthcare support versus Equipment and Maintenance support, Personnel support – non healthcare, and Tactical and operations support); MO2 = Military Occupation dummy grouping 2 (Tactical and operations support versus Healthcare support, Personnel support – non healthcare, and Equipment and maintenance support); MO3 = Military Occupation dummy grouping 3 (Personnel Support – non healthcare versus Healthcare support, Tactical and operations support, and Equipment and maintenance support); NOD = Number of deployments; PTHRT = Perceived Threat While Deployed.
Table 4-6. Logistic regression 5 predictor model of post-deployment adjustment (N=130)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>SE</th>
<th>Wald</th>
<th>(P)</th>
<th>OR</th>
<th>95% C.I. for OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>.046</td>
<td>.022</td>
<td>4.440</td>
<td>.035</td>
<td>1.047</td>
<td>1.003 - 1.093</td>
</tr>
<tr>
<td>Post-deployment Social Support</td>
<td>.067</td>
<td>.029</td>
<td>5.440</td>
<td>.020</td>
<td>1.070</td>
<td>1.011 - 1.132</td>
</tr>
<tr>
<td>Malevolent Deployment Environment</td>
<td>-.039</td>
<td>.020</td>
<td>3.669</td>
<td>.055</td>
<td>0.962</td>
<td>0.925 - 1.001</td>
</tr>
<tr>
<td>Stressful Life Events</td>
<td>-.004</td>
<td>.002</td>
<td>2.868</td>
<td>.090</td>
<td>0.996</td>
<td>0.992 - 1.001</td>
</tr>
<tr>
<td>Combat Exposure</td>
<td>-.030</td>
<td>.045</td>
<td>0.440</td>
<td>.507</td>
<td>0.970</td>
<td>0.888 - 1.060</td>
</tr>
</tbody>
</table>

SE = standard error

*Model summary: \(\chi^2 = 48.506, P < .001\), \(-2\text{loglikelihood} = 131.682\), Cox and Snell \(R^2 = .311\), Nagelkerke \(R^2 = .415\).

Table 4-7. Odds ratios for resilience and post-deployment social support scores increases and the corresponding odds of post-deployment adjustment

<table>
<thead>
<tr>
<th>Resilience Score Increase</th>
<th>OR</th>
<th>Post-deployment Social Support Score Increase</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.05</td>
<td>1</td>
<td>1.07</td>
</tr>
<tr>
<td>10</td>
<td>1.58</td>
<td>10</td>
<td>1.95</td>
</tr>
<tr>
<td>20</td>
<td>2.50</td>
<td>20</td>
<td>3.82</td>
</tr>
<tr>
<td>30</td>
<td>3.97</td>
<td>30</td>
<td>7.46</td>
</tr>
<tr>
<td>40</td>
<td>6.30</td>
<td>39</td>
<td>13.64</td>
</tr>
<tr>
<td>50</td>
<td>9.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>13.76</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Score Increase = Points increase in score on Resilience or Post-deployment Social Support scales.

\(OR = \text{Odds Ratio} = e^{\text{the product of the score difference} \times \text{the coefficient }(.046 \text{ for Resilience and } .067 \text{ for Post-deployment Social Support})} = \text{the odds of Post-deployment Adjustment for the range of scores represented in the sample.}\)
Table 4-8. Logistic regression 7 predictor model of post-deployment adjustment (N=130)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>SE</th>
<th>Wald</th>
<th>P</th>
<th>OR</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>.050</td>
<td>.023</td>
<td>4.700</td>
<td>.030</td>
<td>1.051</td>
<td>1.005</td>
<td>1.100</td>
</tr>
<tr>
<td>Post-deployment Social Support</td>
<td>.066</td>
<td>.029</td>
<td>5.031</td>
<td>.025</td>
<td>1.068</td>
<td>1.008</td>
<td>1.131</td>
</tr>
<tr>
<td>Malevolent Deployment Environment</td>
<td>-.035</td>
<td>.021</td>
<td>2.953</td>
<td>.086</td>
<td>0.965</td>
<td>0.927</td>
<td>1.005</td>
</tr>
<tr>
<td>Stressful Life Events</td>
<td>-.004</td>
<td>.002</td>
<td>2.734</td>
<td>.098</td>
<td>0.996</td>
<td>0.992</td>
<td>1.001</td>
</tr>
<tr>
<td>Combat Exposure</td>
<td>.005</td>
<td>.054</td>
<td>0.007</td>
<td>.932</td>
<td>1.005</td>
<td>0.903</td>
<td>1.118</td>
</tr>
<tr>
<td>Individual Augmentee Status</td>
<td>.746</td>
<td>.460</td>
<td>2.637</td>
<td>.104</td>
<td>2.109</td>
<td>0.857</td>
<td>5.194</td>
</tr>
<tr>
<td>Perceived Threat While Deployed</td>
<td>-.203</td>
<td>.195</td>
<td>1.089</td>
<td>.297</td>
<td>0.816</td>
<td>0.557</td>
<td>1.195</td>
</tr>
</tbody>
</table>

SE = standard error

*Model summary: χ² = 53.151, P < .001, -2loglikelihood = 127.036, Cox and Snell R² = .336, Nagelkerke R² = .447.
CHAPTER 5
DISCUSSION

Post-deployment Adjustment

For more than a decade, the U.S. Navy has supported an unprecedented high number of war and peacekeeping missions fighting the war on terrorism throughout the world (Institute of Medicine, 2010). Thus, well-adjusted personnel who maintain readiness to deploy and carry out these missions (i.e. the physical and mental wellness to support occupational competence) are paramount to national security. However, as many as 85% (Shea et al., 2010) of service members who return home for reintegration following a deployment experience adjustment difficulties in one or more personal or professional areas in the short-term and 45% of those service members with short-term adjustment difficulties have persistent adjustment problems in the long term (i.e. greater than 42 months) (Sayer et al., 2010). This is a significant problem, since post-deployment adjustment difficulties can severely interfere with and hamper the general health and wellbeing of service members, thus, interfering with deployment readiness for future missions (Bryant, 2003; Sayer et al., 2010; Sayers et al., 2009; Thompson et al., 2004).

Although little has been reported on short-term adjustment (Blais et al., 2009; Bowling & Shermian, 2008; Katz et al., 2010; MacDermid Wadsworth, 2010), resilience (King et al., 1999; King et al., 2006; Pietrzak et al., 2009; Pietrzak et al., 2010), social support (Engdahl et al., 1997; Kaspersen et al., 1999; King et al., 1999; King et al., 2006; Pietrzak et al., 2009), and characteristics of the transition (e.g. combat, malevolent deployment environments, and/or additional stressful life events) (Keane et al., 2006; King et al., 2006) have been identified as factors that influence long-term
adjustment. However, this research has only been carried out on service members two or more years after returning from deployment (Kessler et al., 1995; King et al., 2006; Pietrzak et al., 2009) and included service members with post-traumatic stress disorder (PTSD) or probable PTSD. Given the ongoing uncertainty of world affairs and the necessary readiness for rapid multiple deployments, short-term adjustment is central to the Navy’s mission and national security.

Therefore, using Schlossberg’s (1981) Model for Analyzing Human Adaptation (Adjustment) to Transition the primary purpose of this study was to determine if the factors identified as important for long-term adjustment (e.g. resilience, social support, combat exposure, malevolent deployment environment exposure, and additional stressful life events) predicted short-term adjustment (12 months or less) among service members, without PTSD or probable PTSD, after deployment. The secondary purpose of this study was to examine whether resilience, social support, combat exposure, malevolent deployment environments, and additional stressful life events predicted short-term adjustment among service members after deployment when controlling for Individual Augmentee (IA) experience (deploying with a unit other than one’s own), military occupational specialty (MOS), gender, marital status, number of land-based deployments, and perceived threat while deployed.

**Role of Resilience and Post-deployment Social Support in Adjustment**

The results of this study support the hypothesis that recently redeployed service members with high resilience and high social support have greater post-deployment adjustment. Service members with high resilience were those who were able to adjust to adversity and life circumstances by possessing the abilities to 1) view change/stress as a challenge/opportunity and remain committed (perseverant), 2) to engage the
support of others and pursue personal and collective goals, 3) to maintain confidence in
their effectiveness and to acknowledge the strengthening effects of stress and past
successes, 4) to maintain a sense of humor and action oriented problem solving
approach, and 5) to remain patient, tolerant of negative affect, and optimistic. Service
members with high post-deployment social support endorsed the perception that family,
friends, coworkers, leaders, and the community provided adequate emotional
sustenance and instrumental assistance to the service member after returning home
from deployment. These results are consistent with Schlossberg’s theory and empirical
evidence that characteristics of the individual experiencing the transition (i.e. the
possession of individual qualities that confer resilience) and that characteristics of the
transition environment (i.e. post-deployment social support) positively influence
adjustment to transition.

Results from this study showed that service members who endorsed high post-
deployment adjustment appeared to meaningfully integrate their transitional
experiences into their personal and social lives as evidenced by their limited career,
health, intimate relationship, social relationship, and stress reaction difficulties and few
concerns about their deployment. These findings are similar to the findings of others
who reported on short-term adjustment in non-military repatriated Sojourners (Herman
& Tetrick, 2009; Sussman, 2001; Sussman, 2002; Szkudlarek, 2010), and veterans after
long-term post-deployment adjustment (Engdahl et al.,1997; Kasperson et al., 2003;
King et al., 1999; King et al., 2006; Pietrzak et al., 2009; Pietrzak et al., 2010). Service
members in this study (all of which screened negative for PTSD and probable PTSD),
who endorsed higher adjustment in the short-term, possessed higher levels of qualities that confer resilience and higher levels of post-deployment social support.

**Characteristics of the Transition and Adjustment**

The results of this study confirm that characteristics of the transition that are related to high levels of stressful exposure (e.g. combat exposure, malevolent deployment environment, and additional stressful life events) negatively influence adjustment to transition (Schlossberg, 1981). All three characteristics of the transition that are believed to represent higher levels of stressful exposure negatively influenced post-deployment adjustment. However, none of the characteristics of the transition measured in this study displayed a statistically significant negative influence on post-deployment adjustment.

Therefore, the results of this study did not support the hypothesis that service members with low exposure to combat, malevolent deployment environments, and additional stressful life events have greater post-deployment adjustment. Malevolent deployment environments (e.g. lack of desirable food, uncomfortable climate, cultural difficulties, inadequate equipment, and long workdays), combat exposures (e.g. firing a weapon, being fired on, witnessing injury and death, and going on special missions that involve these experiences), and additional stressful life events (e.g. death of a spouse, divorce, birth of a child) were not significantly related to post-deployment adjustment. However, malevolent deployment environment did approach statistical significance ($p = .055$) and may have reached significance in a larger sample. There are several possibilities that may help explain why characteristics of the transition were not significantly related to short-term post-deployment adjustment in the present study.
For example, there may be additional salient factors that influence transition to post-deployment adjustment that are not currently known and, thus, were not measured. Two characteristics of the transition (anticipation of homecoming and meaningfulness of work) that may represent salient factors in predicting post-deployment adjustment were not assessed in the present study. Adler et al. (2011) postulate that service members who anticipate an unrealistic and, therefore, unrealized deployment homecoming transition will likely experience adjustment difficulties. Also, service members who found meaning in their work during deployment but not after deployment may become discontented and experience adjustment difficulties. Conversely, service members who did not find meaning in their work while deployed may fail to see the usefulness of their sacrifices and experience adjustment difficulties. Therefore, unrealistic anticipations of homecoming and lack of meaningfulness of work represent characteristics of the deployment transition that may be salient factors in short-term and/or long-term post-deployment adjustment.

Prior studies of the effects of combat, malevolent deployment environments, and additional stressful life events have included service members with PTSD or probable PTSD and a conceptualization of post-deployment maladjustment equating to psychiatric diagnoses. Adler et al. (2011) noted that in order to accurately describe the psychological experiences of service members’ following a deployment, the concept of post-deployment adjustment needs to be expanded to include adjustment issues that are not part of a psychiatric disorder. Adjustment was high in the present study and these service members may have experienced a different transition than in previous studies. Servicemembers experiencing PTSD or probable PTSD may be
simultaneously adjusting to those disorders, as well as, the post-deployment reintegrations (Adler et al., 2011; Shea et al., 2010; Slone & Friedman, 2008). It may be that characteristics of the deployment (i.e. combat exposure) are important predictors of PTSD (Pietrzak et al., 2009) but less important in predicting degree of adjustment in those who don’t have a diagnosis of PTSD.

In the short-term, service members may be focused on responding to the changes that took place in the service member’s home life and support network during deployment (Brenner et al., 2008; Gambardella, 2008; Slone & Friedman, 2008) and not the combat experiences. These include reestablishing social connections, clarifying relationship roles, and reestablishing work roles — perhaps even navigating a new working environment (Adler et al., 2011; Doyle & Peterson, 2005; Gambardella, 2008;). The primary short-term task of responding to these demands may distract the service member from fully considering deployment experiences (Bowling & Shermian, 2008). As the process of post-deployment transition unfolds, these demands are either dealt with positively or negatively (Blais et al., 2010), and the service member begins to shift their focus and take account of deployment related experiences. Hence, combat experiences may increase in their salience for effecting long-term post-deployment adjustment but not short-term adjustment.

Different coping mechanisms, or at least coping mechanisms that are sustainable in the short-term, may not be effective or sustainable in the long-term (Adler et al., 2011; Figley & Nash, 2007). Service members may suppress dealing with these experiences in the short-term — which is a necessary coping mechanism during the deployment — so that they can remain focused and ready for the next mission (Ruzek et al., 2011).
Although remaining in complete control and suppression of emotional processing is
often necessary in the deployment environment (Figley & Nash, 2007), this strategy is
less than ideal during the post-deployment phase because eventually it interferes with
interpersonal relationships (Bowling & Shermian, 2008; Ruzek et al., 2011). The
unremitting stress of maintaining suppression is thought to take an increased emotional
and psychological toll that may result in serious or chronic adjustment disorders, such
as PTSD, evident in long-term adjustment (Ruzek et al., 2011). Whether or not it is a
useful coping strategy, suppression of exposures to combat, malevolent deployment
environments, and additional stressful life events may work in the short-term but may
not be sustainable in the long-term. If suppressed factors are not remedied in the short-
term, adjustment difficulties emerge or continue in the long-term post-deployment.

**Other Factors and Post-deployment Adjustment**

There were several other factors that from a military standpoint were likely to be
an added source of stress and may have effected adjustment. The other factors that
were measured in this study included Individual Augmentee status, military occupation,
gender, marital status, number of land-based deployments, and perceived threat while
deployed (Blais, Thompson, & McCreary, 2009; Charavastra & Cloitre, 2008; Figley &
Nash, 2007; King et al., 2006; Street, Vogt, & Dutra, 2009; Litz, Figley & Nash,
2007; National Center for PTSD, 2008; Tannelien 2008; Vasterling, 2010). Gender,
marital status, military occupation, and number of land-based deployments were not
significantly related to post-deployment adjustment and were not included as covariates
in analyses. Service members with higher resilience and social support have greater
post-deployment adjustment after controlling for Individual Augmentee status and
perceived threat while deployed. Therefore, resilience and post-deployment social
support may be more important than characteristics of the transition (malevolent deployment environments, combat exposure, and additional stressful life events) in predicting short-term post-deployment adjustment.

**Limitations**

There are several methodological limitations of this study. The convenience sample may not be representative of the total Navy force structure. The enlisted service members were slightly older, with 19% fewer enlisted between the ages of 20 and 29, and slightly more black (+8%) and female service members (+7%). However, Hispanic, Asian, other minority, and married service member representation was similar between the sample and the total Navy force structure.

The ceiling effects of post-deployment adjustment required dichotomizing it in the analyses which may have resulted in a loss of information and may have reduced the power to detect significant relationships. The failure to include more service members with low post-deployment adjustment reduced the variation explained by the predictors. However, it may be that the high adjustment scores found in this sample of service members — none of which had psychiatric disorders — are representative of the target population. Future studies may help determine if variations in predictors account for unique patterns of domain specific post-deployment adjustment, such as, career challenges, social difficulties, intimate relationship problems, and health problems.

The measurement of stressful life events used in this study was a response format that asked respondents to circle the events that they have experienced in the last 12 months. It was not possible to determine if the non circled events were not experienced or were missing. For purposes of this study, it was assumed that none of the non circled items represented missing data because at least one item on the additional
stressful life events instrument was identified (circled) on all cases. Moreover, there were no missing data on any of the other main variable measurement instruments.

Only a select number of factors that may have affected adjustment were administered. There may have been other salient factors that should be considered for future studies in this area (e.g. anticipation of homecoming and meaningfulness). Also, the constructs of resilience and post-deployment social support are multidimensional and studies that use broad measures of these constructs may increase understanding of the complex relationship between these constructs. For example, one may examine if service members with higher resilience attract more post-deployment social supports which increases post-deployment adjustment and service members experiencing low post-deployment adjustment may be less resilient and, therefore, unable to garner post-deployment social support.

Finally, the cross-sectional design does not allow for time-order examination of factors predicting post-deployment adjustment. Longitudinal studies are warranted to describe the transition and post-deployment adjustment as it unfolds.

**Strengths**

Despite these limitations, this study is the first to examine the role of resilience and post-deployment social support in predicting short-term post-deployment adjustment in Navy personnel without a diagnosis of PTSD. A strength of this study was the very high participation rate (88.5%). The high participation rate in this study suggests that post-deployment adjustment is a topic important to redeployed service members and that they are willing to share their experiences — under the right conditions. For example, in this study, face-to-face recruitment was employed, which was also found to be effective in other studies with military service members (Katz et al., 2010; Newby et al., 2005).
The anonymous response format – suggested by Haas et al. (2006), McPherson et al. (2004), and Trent et al. (2007) – offered during a regular clinic visit and providing a private setting where respondents could complete the questionnaires, allowed participants to work at their own pace. Face-to-face recruitment, anonymous response formats, and private data collection venues should be employed in other studies involving service members whenever feasible.

**Suggestions for Further Study**

Longitudinal studies that investigate the role of resilience and social support in predicting post-deployment adjustment are needed to gain a complete understanding of the post-deployment transition process. A possible method for studying the short-term post-deployment adjustment process is to survey service members within 1 month post-deployment, again at 3-6 months post-deployment, and again at 1 year post-deployment. This longitudinal approach would provide greater understanding of the post-deployment transitional process and establish the role of resilience and social support across various phases of the transition. The relationships between salient variables should be measured in all phases of the post-deployment transition in order to determine the similarities and differences between both short and long-term post-deployment adjustment and would aid in determining the most appropriate types of assistance to offer service members. Interventions designed to increase resilience and post-deployment social support should be developed and tested.

**Importance of This Work**

The Navy currently uses universal prevention measures called the Operational Stress Control (OSC) program to address deployment stressors (Ruzek et al., 2011) with a goal of improving adjustment across all phases of deployment, including
redeployment. The OSC program is grounded in promoting self-care (e.g. good sleep, fitness, eating habits, maintaining a sense of humor, positive attitude and social connections), and early detection of stress reactions in comrades — and is believed to contribute to resilience building by providing informational support (Bowles & Bates, 2010; Ruzek et al., 2011). Therefore, the results of this study support the fundamental resilience and social support underpinnings of the Navy’s use of the OSC program. However, the OSC program was not designed to predict post-deployment adjustment.

One of the challenges of Navy medicine is predicting which service members are most at risk for experiencing low post-deployment adjustment. Current post-deployment screening measures to identify service members who need professional mental health services and those most at risk of experiencing adjustment difficulties include the Post-deployment Health Assessment (PDHA) and the Post-deployment Health Re-assessment (PDHRA) which focus largely on assessing the degree of exposure to deployment stressors (e.g. exposure to combat and malevolent deployment environments) and not on resilience and post-deployment social support. The results of this study are the first to show that characteristics of the transition (e.g. combat exposure and malevolent deployment environments) may be less important than post-deployment social support and an individual’s own resilience characteristic in predicting who is most at risk for experiencing low short-term post-deployment adjustment. There is also evidence that characteristics of the transition may be less important than post-deployment social support and an individual’s own resilience characteristics in predicting long-term post-deployment adjustment. For example, Pietrzak et al. (2010) showed that post-deployment social support and resilience accounted for 28% and 16%
of the variance in post-deployment adjustment, respectively — whereas combat exposure only accounted for 7.8% of the variance in long-term post-deployment adjustment. Therefore screening may be better served by augmenting the current post-deployment screening process with measures of resilience and post-deployment social support.

Service members identified as being most at risk for low post-deployment adjustment may benefit from programs designed to assist redeployed service members adjust to family, occupational, and social demands. Unfortunately, these types of evidence-based early interventions have not been developed because of a lack of evidence (Institute of Medicine, 2010; Ruzek et al., 2011). Unlike the transition characteristics (combat exposure, malevolent deployment environments, and additional stressful life events), an individual’s own resilience characteristic and post-deployment social support are modifiable. The results of this study provide additional evidence that programs designed to increase resilience and post-deployment social support may serve as a universal prevention (i.e. Operational Stress Control program) and that providing targeted opportunities — for the service members most at risk, to increase resilience and post-deployment social support — will promote post-deployment adjustment before adjustment difficulties emerge, worsen, or become chronic (Bryant, 2003; Sayer et al., 2010; Sayers et al., 2009). For example, future interventions that directly bolster a service member’s post-deployment social support, similar to the peer support being evaluated by the Canadian Forces in their Operational Stress Injury Social Support Program (Figley & Nash, 2007), may increase the effectiveness of the U.S. Operational Stress Control program.
Conclusion

The results of this study suggest that augmenting the current post-deployment screening process with measures of resilience and post-deployment social support may substantially improve the ability to predict service members most at risk for low post-deployment adjustment. Although the results of this study demonstrate that efforts to build resilience and post-deployment social support can contribute to higher post-deployment adjustment, future studies designed to test the effectiveness of resilience and social support building programs (i.e. Operational Stress Control Program) are warranted. The results of this study suggest that resilience and post-deployment social support may be useful assessments in determining which service members may require more than informational support in order to adjust to post-deployment transition. Finally, evidence-based interventions that increase resilience and post-deployment social support should be developed and tested to promote post-deployment adjustment before adjustment difficulties emerge, worsen, or become chronic.
APPENDIX A
PERMISSIONS AND ENDORSEMENTS OF SCALE MODIFICATIONS

RE: PDRI

Katz, Lori [lori.katz@va.gov]
You replied on 8/11/2010 4:51 PM.
Sent: Thu 7/29/2010 7:22 PM
To: craig cunningham

This sounds great... I have to go but I just wanted to give you a quick response to say that I think your modifications will be fine and you have my permission to use the measure! All the best to you! -- Lori Katz

From: craig cunningham
Sent: Tuesday, July 27, 2010 6:26 PM
To: Katz, Lori
Subject: RE: PDRI

Dr. Katz,
I have had to modify my study in large part due to the sensitive nature of the topic I am studying and the fact that I am a student and the Navy expects me to finish my program on their time line. Therefore, I am planning to study the predictive relationships between the protective factors of resilience and social support and the outcome of adjustment in post deployed servicemembers. There is a paucity of studies on post-deployment adjustment and those that have been conducted focus on the extreme psychopathological issues (e.g. PTSD and Major depression) and have been conducted on veterans 2 or more years after returning from deployment. I would like to study resilience and social support and their relationship to the short-term adjustment of post-deployed servicemembers around the time they are completing their post deployment health reassessments (PDHRA) approximately 4-6 months after returning. My hope is that I can build upon this study and conduct my dyadic support intervention as soon as I graduate, when I have some positional authority again and fewer time restrictions etc.

In respect to my plans, I have two questions or groups of questions that I hope you can answer for me:
RE: PDRI

Katz, Lori [lori.katz@va.gov]

You replied on 8/11/2010 4:51 PM.

Sent: Thu 7/29/2010 7:22 PM
To: craig.cunningham

Dr. Katz,
I have had to modify my study in large part due to the sensitive nature of the topic I am studying and the fact that I am a student and the Navy expects me to finish my program on their time line. Therefore, I am planning to study the predictive relationships between the protective factors of resilience and social support and the outcome of adjustment in post deployed servicemembers. There is a paucity of studies on post-deployment adjustment and those that have been conducted focus on the extreme psychopathological issues (e.g. PTSD and Major depression) and have been conducted on veterans 2 or more years after returning from deployment. I would like to study resilience and social support and their relationship to the short-term adjustment of post-deployed servicemembers around the time they are completing their post deployment health reassessments (PDHRA) approximately 4-6 months after returning. My hope is that I can build upon this study and conduct my dyadic support intervention as soon as I graduate, when I have some positional authority again and fewer time restrictions etc.

In respect to my plans, I have two questions or groups of questions that I hope you can answer for me:

1. Do I have your permission to use the PDRI to measure post-deployment readjustment in my study?
2. How would you reword item #23 to make it more appropriate for servicemembers who are on active duty versus veterans? Item #23 is a career question and reads ‘Having difficulty finding a job’. One thought I had is to ask ‘Having difficulty managing my job’. Any thoughts or would you just not use the item? I think the rest of the items could be interpreted within the context of active duty military service.

Very Respectfully,

CDR(s) Craig Cunningham
RE: RSES request for paper and any other info

Dan and Lynda King [dandlking@comcast.net]

You replied on 7/28/2010 11:33 AM.

Sent: Wed 7/28/2010 11:08 AM
To: craig.cunningham
Cc: dawne.vogt@va.gov

Craig:

We generally take a pretty liberal view on substituting items when they capture the intent of the construct. In this case, we understand that the item in the DRRI is just not really suited for active duty personnel. We like the new item a lot and think it is very much in tune with the intent of the original item. So, we would recommend that you use it. We are putting Dr. Dawne Vogt on this email, as she is doing ongoing research on the DRRI, especially with regard to updating the measures. This might motivate some more thinking about making this item a little more general to both those still on active duty/career military and those who have left the military or returned home after National Guard/Reserve deployment.

Thanks for letting us know. Did you get promoted? If so, congrats! What does the (s) stand for?

Best. Stay in touch.

Lynda
Dan
RE: RSES request for paper and any other info

Dan and Lynda King [dandlkng@comcast.net]

You replied on 7/28/2010 11:33 AM.

Sent: Wed 7/28/2010 11:08 AM
To: craig.cunningham
Cc: dawne.vogt@va.gov

At 09:35 PM 7/27/2010, you wrote:

Dr. Dan and Lynda King,
Thank you again for taking the time to share a telephone conversation with me and for providing your wisdom and personal contacts.

I am planning on using the post-deployment social support scale from the DRRI in my study. My population will be active duty servicemembers completing their post-deployment health reassessments (approx. 4-6 months after returning). Most of the items on this scale can reasonably be interpreted in the context of active duty personnel except for item #10, which reads 'The people I work with respect the fact that I am a veteran'. How would you reword this item? One idea I had was to ask 'People in my community respect the fact that I am a servicemember.' Any thoughts, or would you just not use that item?

Very Respectfully,
CDR(s) Craig Cunningham

From: Dan and Lynda King [mailto:dandlkng@comcast.net]
Sent: Monday, June 28, 2010 4:58 PM
To: Chris Johnson; ccunningham@ufl.edu
Subject: RSES request for paper and any other info
RE: CD-RISC
Jonathan Davidson [david011@mc.duke.edu]

Sent: Tue 3/30/2010 12:41 PM
To: craig cunningham

Dr. Davidson,
Thank you. Could I get a copy of the 25-item scale. Originally, I was planning on using the 10-items but after discussing it with my committee chair, we believe it would be valuable to collect and analyze data on all the items.

Very Respectfully
Craig Cunningham

From: Jonathan Davidson [mailto:david011@mc.duke.edu]
Sent: Tuesday, March 30, 2010 10:17 AM
To: Cunningham,Craig A
Cc: kathryn_connor@merck.com
Subject: Re: CD-RISC

Dear Craig:

Thank you for returning the froms, which I was able to open fine. Here is the scale and user’s guide for your project. We do appreciate your interest in the CD-RISC, and wish you well in your work. If you have any questions, please don’t hesitate to let me know.

With kind regards,

Jonathan
Dear Sir or Madam:

Thank you for your interest in the Deployment Risk and Resilience inventory (DRRI). Enclosed is the complete suite of DRRI scales and the DRRI informational packet (including scoring instructions, a description of the development of the instrument, and its psychometric properties), along with a brief informational form for you to complete and return at your earliest convenience. We request that all individuals or groups who receive the DRRI complete this form so that we can keep track of the use of this instrument. Please make sure to provide complete and accurate contact information.

This form can be returned via EMAIL to: Emily.Scheiderer@va.gov

FAX to (857) 364-6120

OR MAIL to: Emily Scheiderer, Women’s Health Sciences Division (116B-3), National Center for PTSD, VA Boston Healthcare System, 150 S. Huntington Ave., Boston, MA 02130.

The DRRI was developed in a collaborative effort by Dr. Daniel King, Lynda King, and Downe Vogt. It is a psychometrically sound set of scales assessing predeployment/prewar, deployment/war-zone, and postdeployment/postwar risk and resilience factors for stress-related illnesses. Each DRRI scale may be used on its own; alternatively, you are welcome to use all of the scales together.

Importantly, at this stage, the DRRI is intended primarily for research purposes. While it has not yet been validated as a clinical instrument and there are no established clinical norms, it may be used in the clinical setting to gather information that can assist the clinician in understanding the client’s range of deployment experiences and to inform decisions regarding the administration of appropriate diagnostic tools.

If you choose to use a scale or scales from the DRRI for a research study, and your IRB agreement allows, we would appreciate it if you would provide us with a computer file containing your participants’ anonymous item responses on the DRRI scale or scales that you administer. The data will be used for psychometric purposes only, to accumulate an integrated database for future norms.

If you have any questions, please feel free to contact Emily Scheiderer, DRRI Project Assistant, by telephone at (857) 364-6253 or by email at Emily.Scheiderer@va.gov.

Thank you.
30 September 2010
From: Craig Cunningham LCDR, NC, USN
To: Director for Branch Health Clinics
Via: Officer in Charge, BHC Jacksonville
Program Manager, Deployment Health, BHC Jacksonville

Subj: INSTITUTIONAL LETTER OF SUPPORT ICO LCDR CRAIG CUNNINGHAM, PHD STUDENT, UNIVERSITY OF FLORIDA

1. I am a PhD student at the University of Florida, proposing to conduct my dissertation research within the deployment health clinic (DHC) at the Branch Health Clinic Jacksonville. My dissertation research will evaluate the role of resilience and social support in post-deployment adjustment.

2. Specific support requested is to utilize the DHC staff member responsible for conducting the PDHRA interview to assist in recruitment coordination and space for participants to complete and return surveys.

3. By integrating the study procedures with those procedures already being conducted at the DHC, this research will have minimal impact on the post-deployment health reassessment process. The average required time to screen and recruit each participant is expected to be two to three minutes.

4. This research has significant military relevance and is consistent with the DHC mission to provide medical and behavioral health screening and care to service members returning from deployment. The results of this study are expected to inform programs designed to improve psychosocial adjustment for post-deployment Navy personnel and to promote operational readiness.

5. Respectfully request your endorsement of this research as indicated by your signature below.

C. A. Cunningham
LCDR NC USN
Program manager, Deployment Health, BHC Jacksonville
Tracy Hejmanowski, Ph.D.
Licensed Clinical Psychologist
Deployment Health Center

Officer in Charge, BHC Jacksonville
Antony Joseph, CDR, MSC, USN

Director, Branch Medical Clinics
Michael McGinnis, CDR, MC, USN

30 SEP 2010

0401T10
15 November 2010

From: Craig Cunningham LCDR, NC, USN

To: Deborah A. Jones, PA-C

Subj: LETTER OF SUPPORT ICO LCDR CRAIG CUNNINGHAM, PHD STUDENT, UNIVERSITY OF FLORIDA

1. As you are aware, I am a PhD student at the University of Florida proposing to conduct my dissertation research within the Deployment Health Clinic (DHC) at the Branch Health Clinic Jacksonville. I have shared with you details of my research plans which will evaluate the role of resilience and social support in post-deployment adjustment.

2. Since you are the DHC staff member responsible for conducting the PDHRA interviews, I am requesting your support to assist as the recruitment coordinator for my study.

3. As per our discussions, my plan is to integrate the study procedures with routine PDHRA screening procedures (i.e. using data already collected during the PDHRA screening to make study inclusion/exclusion decisions), therefore, having minimal impact on the post-deployment health reassessment process. The DHC Program Manager (Dr. Hejmanowski), the BHC Officer in Charge (CDR Joseph), and the Director of the BHC (CDR McGinnis) have endorsed my research plans by signing an institutional letter of support.

4. In order to function as the recruitment coordinator, it is necessary that you complete Prerequisite Training (e.g. Collaborative Institutional Training Initiative (CITI) modules and HIPAA for Researchers training modules required by the Navy and the University of Florida for Key Research Personnel) and Recruitment Coordinator Training as per study protocol.

5. Respectfully request your endorsement and personal involvement and support (e.g. agreement to complete all required training and to function as the recruitment coordinator for the duration of the study) of this research as indicated by your signature below.

C.A. Cunningham
LCDR NC USN

[Signature]

Deborah A. Jones, PA-C
My name is Craig Cunningham. I am an active duty nursing student at the University of Florida. I am doing a research study on the thoughts, actions, and social support networks for Navy persons who have deployed.

I want you to share your thoughts, actions, and feelings about your experiences and your social support networks because you have deployed and returned within the past year and I need this information to complete a research project so that I may graduate with a PhD in nursing from the University of Florida. Your choice to take part in this study is voluntary. If you decide not to take part, no one will know. If you decide not to take part, simply place your blank survey in the box that will be pointed out to you and then leave. If you decide to take part in the study, please complete the survey and answer all of the questions. If any questions bother you, you may leave them blank. You will not be asked to provide your name. There will be no way to tie you with your answers. What you share will inform me about the issues and concerns that you face every day.

The purpose of this study is to gather the thoughts and feelings from Navy persons who have deployed. Taking part in this study involves reading and answering questions about your life. It should take no more than 18 - 22 minutes of your time. A total of 750 Navy persons will take part in this study.

The risks to you by taking part in this study are minimal and felt to be no greater than the risks in "normal" day-to-day life. If you become upset when you answer questions about your deployment, you may also become upset when you answer the study questions. If you do become upset and wish to speak to someone about it, simply return to the person who gave you this packet and tell them you want a referral to talk about your upset. You may also let one of the other staff members know you would like to talk to someone about a deployment issue.

The research will not likely help you personally. The results may help those doing the research learn about adjusting to life after a deployment. What you share may help future Navy persons adjust to life after deploying.

If you suffer any harm as a result of taking part in this study, treatment is available at the Jacksonville Naval Hospital and Branch Health Clinic. Any injury as a result of taking part will be assessed and treated in keeping with the care to which you are entitled under law. If you believe you have been injured as a result of taking part in this study, you may call the legal office at 904-542-7816. If you have any questions about your rights as a person while taking part in this study, you can contact the Clinical Investigation Department, at 757-953-5939 and/or the University of Florida Institutional Review Board at 352-273-9600.

Taking part in this study is voluntary. Your choice not to take part will involve no loss of care to which you are entitled under law. You are free to ask questions or to withdraw from the study at any time. If you choose to withdraw, you will not lose any care to which you are entitled. You have not been asked to sign a consent form in order to protect your identity. By choosing to complete the questions you are indicating your consent to take part in this study.
# APPENDIX D

## SOURCES OF DEPLOYMENT INFORMATION

<table>
<thead>
<tr>
<th>Sources of Deployment Information</th>
</tr>
</thead>
</table>
| **For questions related to the research study contact:**  
Craig Cunningham RN  
XXX-XXX-XXXX |
| **Military OneSource**  
DoD’s 24/7 Confidential Call Center  
(1800-342-9647,  
[www.militaryonesource.com](http://www.militaryonesource.com))  
provides access to six free private counseling sessions per problem per person with a provider in your local area for issues such as coping with deployment, reintegration, and marital and family problems. |
| **Fleet & Family Services**  
Building 554  
NAS Jacksonville, FL 32212  
(904) 542-2766 |
| Provides individual, family, and marriage counseling, classes on parenting, stress management, new parent support, personal finances and relocation services.  
Clinical counselors specializing in helping Individual Augmentees and their families adjust before, during, and after deployment. |
| **Deployment Health Center**  
Naval Hospital Branch Health Clinic  
Bldg 964  
NAS Jacksonville, FL 32212  
904-542-3500 ext 8115 |
| **Naval Hospital Jacksonville**  
2080 Child St  
Jacksonville, FL 32214  
Operational support 904-542-7458  
Mental Health  
Information Desk 904-542-7300 |
| **MilitaryHOMEFRONT**  
[www.militaryhomefront.dod.mil](http://www.militaryhomefront.dod.mil) |
| **Naval Hospital Portsmouth Deployment Health Center**  
| **Deployment Health & Family Readiness Library**  
[http://deploymenthealthlibrary.fhp.osd.mil](http://deploymenthealthlibrary.fhp.osd.mil) |
| **Naval Hospital Portsmouth**  
Psychiatry 757-953-5269  
Psychology 757-953-7641 |
| **National Military Family Association**  
[www.nmfa.org](http://www.nmfa.org) |
| **Online mental health screening tools**  
Anonymous self assessments for depression, alcohol disorder, post-traumatic stress disorder (PTSD), generalized anxiety disorder, and bipolar disorder are available online at [www.MilitaryMentalHealth.org](http://www.MilitaryMentalHealth.org) |
<table>
<thead>
<tr>
<th><strong>Demographics:</strong> Please answer the following questions about your military history and your personal background by circling or filling in the correct response.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is your Military occupation (fill in)</td>
<td>Do not write in this column</td>
</tr>
<tr>
<td>2. What is your Military rank (fill in)</td>
<td></td>
</tr>
<tr>
<td>3. What was the location of your most recent deployment (fill in)</td>
<td></td>
</tr>
<tr>
<td>4. How many months were you away from home on your most recent deployment? (fill in)</td>
<td></td>
</tr>
</tbody>
</table>
| 5. Did you deploy as an Individual Augmentee (IA) for your most recent deployment? (Circle number) | 0. NO  
1. YES |
| 6. How many land-based deployments (including your most recent deployment) have you experienced (circle)? | 1 2 3 4 5 6 7 |
| 7. What is your age (in years) (fill in) |  |
| 8. What is your gender (circle) | 0. Male  
1. Female |
| 9. What is your race/ethnicity (circle) | 1. Asian  
2. Black  
3. Hispanic  
4. Native American  
5. White  
6. Other |
## Demographics (Continued):

Please answer the following questions about your military history and your personal background by circling or filling in the correct response. **Do not write in this column.**

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
</table>
| 10. What is your level of education (circle)                             | 1. Did not graduate high school  
2. High school graduate (including GED)  
3. Technical school  
4. Some college (no degree)  
5. Associates Degree  
6. Bachelors degree  
7. Graduate Degree |
| 11. How many years of education have you completed? (fill in)             |                                                                        |
| 12. What is your current relationship status (circle)                    | 1. Single, never married  
2. Married  
3. Living with partner  
4. Divorced  
5. Separated  
6. Widowed |
| 13. How long (in years) have you been at your current relationship status from question 13? (fill in) | |
Although permission was given for use of the CD-RISC (Resilience) scale, a copy of the CD-RISC (Resilience) scale was not included as part of user agreement:

“permission cannot be given to reproduce the scale in publications resulting from research with the scale or in dissertations.”

All rights reserved. No part of this document may be reproduced or transmitted in any form, or by any means, electronic or mechanical, including photocopying, or by any information storage or retrieval system, without permission in writing from Dr. Davidson at david011@mc.duke.edu. Copyright © 2001, 2003, 2007, 2009 by Kathryn M. Connor, M.D., and Jonathan R.T. Davidson, M.D.
**Post Deployment Social Support:** The next set of statements refers to social support after deployment. Please decide how much you agree or disagree with each statement and circle the number that best fits your choice.

<table>
<thead>
<tr>
<th>After Deployment:</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The reception I received when I returned from my deployment made me feel appreciated for my efforts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. The American people made me feel at home when I returned.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. When I returned, people made me feel proud to have served my country in the Armed Forces.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I am carefully listened to and understood by family members or friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Among my friends or relatives, there is someone who makes me feel better when I am feeling down.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I have problems that I can't discuss with family or friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Among my friends or relatives, there is someone I go to when I need good advice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. People at home just don't understand what I have been through while in the Armed Forces.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. There are people to whom I can talk about my deployment experiences.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**Post Deployment Social Support (Continued):** The next set of statements refers to social support after deployment. Please decide how much you agree or disagree with each statement and circle the number that best fits your choice.

<table>
<thead>
<tr>
<th>After Deployment:</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. People in my community respect the fact that I am a service member.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. My supervisor understands when I need time off to take care of personal matters.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. My friends or relatives would lend me money if I needed it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. My friends or relatives would help me move my belongings if I needed to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. When I am unable to attend to daily chores, there is someone who will help me with these tasks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. When I am ill, friends or family members will help out until I am well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
### Post Deployment Readjustment Inventory

Please rate how true each of the following is since your return from deployment by writing the number that corresponds to the scale above

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Slightly</th>
<th>Somewhat</th>
<th>Considerably</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Feeling pressure to work
2. Having chronic pain
3. Feeling pressure to be “back to normal”
4. Feeling tense, jittery, or anxious
5. Difficulty returning to my role in my family
6. Feeling unmotivated to work
7. Not fitting in socially
8. Having health problems
9. Worried about others who are still deployed
10. Avoiding social situations or crowded places
11. My body not functioning like it used to
12. Mourning the death of fellow service members
13. Wanting to work but not being able to
14. Feeling like I am deteriorating
15. Not wanting to be touched or hugged
16. Missing structure and focus of being deployed
17. Having demands from my partner or family
18. Having difficulty concentrating
19. I’ve changed or others have changed
20. Feeling tired and worn out
21. Being easily irritated with others
22. Something was kept secret while I was away
23. Having difficulty managing my job
24. Having frequent thoughts about deployment
25. Others don’t understand what I went through
26. Feeling useless since returning from deployment
27. Feeling alienated or alone
Post Deployment Readjustment Inventory (continued)

Please rate how true each of the following is since your return from deployment by writing the number that corresponds to the scale above:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Slightly</th>
<th>Somewhat</th>
<th>Considerably</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- 28. My life is on hold (could be redeployed)
- 29. Having difficulty completing tasks
- 30. Having lots of medical appointments
- 31. My partner/family does not understand me
- 32. Having nightmares or difficulty sleeping
- 33. Not wanting to talk about my experiences
- 34. Not knowing what to do next
- 35. Wanting to avoid intimate time with others
- 36. Everything seems trivial since deployment
**Deployment Environment:** The next set of statements is about the conditions of day-to-day life during your deployment. Please read each statement and decide what amount of time you were exposed to each condition over the course of the entire time you were deployed. Circle the number below the appropriate response.

<table>
<thead>
<tr>
<th>While deployed:</th>
<th>Almost none of the time</th>
<th>A few times</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>Almost all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The climate was extremely uncomfortable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I had to deal with annoying animals, insects, or plants during my deployment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I had access to clean clothing when I needed it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I could get a cold drink (for example, water, juice, etc.) when I wanted one.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. The food I had to eat was of very poor quality (for example, bad or old MREs)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. The conditions I lived in were extremely unsanitary.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I had access to bathrooms or showers when I needed them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I got as much sleep as I needed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. The living space was too crowded.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I was able to get enough privacy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. The workdays were too long.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I got the R&amp;R (rest and relaxation) that I needed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I got my mail in a timely manner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. I was exposed to awful smells.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I was subjected to loud noises.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I had to hassle with putting on and taking off NBC equipment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. I had the equipment or supplies to do what I needed to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. My daily activities were restricted because of local religious or ethnic customs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. I felt comfortable living in the culture or cultures where I was deployed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Pressure to conform to the local culture made it difficult for me to do my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Combat Experiences (modified):</td>
<td>Never</td>
<td>A few times over entire deployment</td>
<td>A few times each month</td>
<td>A few times each week</td>
<td>Daily or almost daily</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
<td>----------------------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>While deployed:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I went on combat patrols or missions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I or members of my unit encountered land or water mines and/or booby traps.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I or members of my unit received hostile incoming fire from small arms, artillery, rockets, mortars, or bombs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I or members of my unit received “friendly” incoming fire from small arms artillery, rockets, mortars, or bombs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I was in a vehicle (for example, a truck, tank, APC, helicopter, plane, or boat) that was under fire.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I or members of my unit were attacked by terrorists or civilians.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I was part of a land or naval artillery unit that fired on the enemy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I was part of an assault on entrenched or fortified positions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I took part in an invasion that involved naval and/or land forces.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. My unit engaged in battle in which it suffered casualties.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I personally witnessed someone from my unit or an ally unit being seriously wounded or killed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I personally witnessed soldiers from enemy troops being seriously wounded or killed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I was wounded or injured in combat.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. I fired my weapon at the enemy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I killed or think I killed someone in combat.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
## Life Events: Circle each event that has taken place in your life in the last 12 months

<table>
<thead>
<tr>
<th>Event</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Death of a spouse</td>
<td>100</td>
</tr>
<tr>
<td>2. Divorce</td>
<td>73</td>
</tr>
<tr>
<td>3. Marital Separation</td>
<td>65</td>
</tr>
<tr>
<td>4. Jail term</td>
<td>63</td>
</tr>
<tr>
<td>5. Death of a close family member</td>
<td>63</td>
</tr>
<tr>
<td>6. Personal injury or illness</td>
<td>53</td>
</tr>
<tr>
<td>7. Marriage</td>
<td>50</td>
</tr>
<tr>
<td>8. Fired at work</td>
<td>47</td>
</tr>
<tr>
<td>9. Marital reconciliation</td>
<td>45</td>
</tr>
<tr>
<td>10. Retirement</td>
<td>45</td>
</tr>
<tr>
<td>11. Change in health of family member</td>
<td>44</td>
</tr>
<tr>
<td>12. Pregnancy</td>
<td>40</td>
</tr>
<tr>
<td>13. Sex difficulties</td>
<td>39</td>
</tr>
<tr>
<td>14. Gain of a new family member</td>
<td>39</td>
</tr>
<tr>
<td>15. Business readjustments</td>
<td>39</td>
</tr>
<tr>
<td>16. Change in financial state</td>
<td>38</td>
</tr>
<tr>
<td>17. Death of a close friend</td>
<td>37</td>
</tr>
<tr>
<td>18. Change to different line of work</td>
<td>36</td>
</tr>
<tr>
<td>19. Change in number of arguments with spouse</td>
<td>35</td>
</tr>
<tr>
<td>20. Mortgage over $50,000</td>
<td>31</td>
</tr>
<tr>
<td>21. Foreclosure of mortgage</td>
<td>30</td>
</tr>
<tr>
<td>22. Change in responsibilities at work</td>
<td>29</td>
</tr>
<tr>
<td>23. Son or daughter leaving home</td>
<td>29</td>
</tr>
<tr>
<td>24. Trouble with in-laws</td>
<td>29</td>
</tr>
<tr>
<td>25. Outstanding Personal achievement</td>
<td>28</td>
</tr>
<tr>
<td>26. Spouse begins or stops work</td>
<td>26</td>
</tr>
<tr>
<td>27. Begin or end school</td>
<td>26</td>
</tr>
<tr>
<td>28. Change in living conditions</td>
<td>25</td>
</tr>
<tr>
<td>29. Revision of personal habits</td>
<td>24</td>
</tr>
<tr>
<td>30. Trouble with boss</td>
<td>23</td>
</tr>
</tbody>
</table>
### Life Events (continued): Circle each event that has taken place in your life in the last 12 months

<table>
<thead>
<tr>
<th>Event</th>
<th>Circle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in work hours or conditions</td>
<td>20</td>
</tr>
<tr>
<td>Change in residence</td>
<td>20</td>
</tr>
<tr>
<td>Change in school</td>
<td>20</td>
</tr>
<tr>
<td>Change in recreation</td>
<td>19</td>
</tr>
<tr>
<td>Change in religious activities</td>
<td>19</td>
</tr>
<tr>
<td>Change in social activities</td>
<td>18</td>
</tr>
<tr>
<td>Loan less than $50,000</td>
<td>17</td>
</tr>
<tr>
<td>Change in sleeping habits</td>
<td>16</td>
</tr>
<tr>
<td>Change in number of family get-togethers</td>
<td>15</td>
</tr>
<tr>
<td>Change in eating habits</td>
<td>15</td>
</tr>
<tr>
<td>Vacation</td>
<td>13</td>
</tr>
<tr>
<td>Holidays</td>
<td>12</td>
</tr>
<tr>
<td>Minor violation of laws</td>
<td>11</td>
</tr>
</tbody>
</table>

### Perceived threat while deployed: Please decide how much you agree or disagree with the following statement and circle the number that best fits your choice.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There were moments during deployment when I thought/felt I was in</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>great danger of being wounded or killed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
You have completed the survey!

Please remove the Participant Study Information Sheet and the Sources of Deployment Information to take with you for future reference. Once you have removed the Participant Study Information Sheet and the Sources of Deployment Information, place the rest of the questionnaire in the envelope, seal it, write “THANK YOU” across the seal, and place it through the slot in the file cabinet. THANK YOU FOR PARTICIPATING IN THIS RESEARCH STUDY AND FOR YOUR SERVICE TO OUR COUNTRY!
Recruitment Coordinator Training Manual

Purpose
The purpose of this training was to ensure that the incumbent for the position of Recruitment Coordinator (hereafter ‘trainee’) had the requisite knowledge and skills to implement study participant screening, recruiting, and survey administration protocol so that the integrity of the data, and the rights and dignity of all individuals who were screened, recruited, or participated in this research were protected.

Prerequisite
The Department of the Navy and the University of Florida require human research ethics training of all investigators and key research personnel prior to conducting research. This requirement applies to all research from simple, minimal risk chart reviews and psychosocial surveys to risky experimental drug trials and surgical procedures. At a minimum, the trainee had completed the following set of Collaborative Institutional Training Initiative (CITI) modules required by the Navy and the University of Florida for Key Research Personnel with a social-behavioral focus:

Investigators and Key Research Personnel-Social/Behaviorial (SBR) Focus
1. Belmont Report and CITI Course Introduction
2. Department of The Navy Introduction
3. History and Ethical Principles - SBR
4. Defining Research with Human Subjects - SBR
5. The Regulations and The Social and Behavioral Sciences - SBR
6. Assessing Risk in Social and Behavioral Sciences - SBR
7. Informed Consent - SBR
8. Privacy and Confidentiality - SBR
9. Records-Based Research
10. Research With Protected Populations - Vulnerable Subjects: An Overview
11. Internet Research - SBR
12. Group Harms: Research With Culturally or Medically Vulnerable Groups
13. Hot Topics
14. Conflicts of Interest in Research Involving Human Subjects
15. Department of the Navy HRPP Module
16. Department of the Navy - Information and References

Additionally, the University of Florida requires the following training for key study personnel:
1. Read the Belmont Report (covered in CITI training)
2. Read the Code of Federal Regulations
3. Read the UF IRB Policies and Procedures
4. Read the Researcher Responsibilities
5. Complete the HIPAA for Researchers training modules

Methods
Required reading, role-playing, rehearsal, and feedback were used to prepare the trainee to implement screening, recruitment, and survey administration procedures. These strategies were shown to increase the likelihood of adherence to study protocols (Hubal & Day, 2006; Kratochwill, Elliott, & Busse, 1995; Sterling-Turner, Watson, Wildmon, Watkins, & Little, 2001; Sterling-Turner, Watson, & Moore, 2002).

Materials

1. Written Procedures Section
2. Written Quiz on Study Procedures
3. Written Quiz on Study Procedures Answer Key
4. Participant Inclusion/Exclusion Screening Flow Sheet
5. Practice Forms (9 DD FORM 2900 and PCL-M forms with fictitious data that represent individuals that should and should not be included in the study)
6. Practice Forms Answer Key
7. Script for Introducing the Study
8. Potential Participant Questions
9. Participant Study Introduction Information Sheet

Procedures
The following activities were engaged in by the trainee and the PI until both parties agreed that mastery had been achieved.

1. The trainee read the “Written Procedures Section” and verbally paraphrased the procedures to the PI.
2. The trainee passed the “Written Quiz on Study Procedures” with 100% accuracy. Since the trainee was expected to master the material, the trainee could have taken the quiz as many times as necessary until 100% proficiency was achieved.
3. The trainee practiced screening procedures using the “Participant Inclusion/Exclusion Screening Flow Sheet” in order to decide if potential participants represented by the “Practice Forms” (DDFORM 2900 and PCL-M completed with fictitious data) should be included in the study. Practice continued until the trainee made accurate inclusion/exclusion decisions for all 9 fictitious individuals with 100% accuracy.
4. The trainee practiced recruitment (during role play) by verbally reading the “Script for Introducing the Study” as the PI assumed the role of a potential participant. Role playing continued until both the PI and the trainee believed that the trainee had mastered the activity.
5. The trainee practiced answering study related questions (during role play) by verbally responding as the PI read from the “Potential Participant Questions” document (e.g. Do I have to participate? What is the purpose of the research? and How long will it take?). The trainee used the information contained in the “Participant Study Introduction Information Sheet” to answer these questions. Role playing continued until both the PI and the trainee believed that the trainee had mastered the activity.
Copy of Required Materials

Written Procedures Section

Recruitment. Service members returning from deployment are required to undergo military physical and psychological screening at two time points (within 30 days and 90-180 days). The study sample will be recruited from the DHC when service members report to complete the second of these two required post-deployment health screenings. This time point and venue was selected for several reasons. The first reason relates to the timing of the post-deployment health reassessment screening that coincides with the time point when readjustment concerns begin to emerge at higher rates three to six months after deployment (Milliken et al., 2007). Second, recruiting participants from the DHC provides 1) a centralized location to access the post-deployed naval personnel assigned to the various tenant commands, 2) a location where service members expect to discuss physical and behavioral health needs, 3) reduced risk to participants by integrating study procedures into routine screening procedures already being performed at the DHC, 4) medical and behavioral health resources will be in close proximity in the unlikely event a participant has untoward reaction to study participation, and 5) the service members do not have competing work demands when they report to the DHC.

All active duty Navy personnel completing their post-deployment health reassessment will be eligible for screening and inclusion in this study. Therefore, the demographic characteristics of the sample population are expected to include gender and minority representation that approximates the demographic characteristics of post-deployed Navy personnel at NAS JAX (e.g. 89% male, 66% white, 16% black, 10% Hispanic, 4% Asian, and 4% other).

Recruitment support. Letters of support have been obtained from the Division officer of the Jacksonville Naval Hospital Branch Health Clinics, the Department Head of the DHC, the Deployment Health Psychologist and Program Manager at the DHC, and the Physician Assistant (PA) responsible for conducting the PDHRAs (Appendix B - Letters of Support). A waiver of HIPAA authorization will be obtained from the University of Florida and the US Navy to review medical records necessary to determine those service members who meet study inclusion/exclusion screening criteria.

The DHC Physician Assistant responsible for conducting the PDHRA interview has agreed to be the recruitment coordinator for this study (Appendix B - letters of support). The recruitment coordinator will screen, recruit, and administer the study survey, thus blinding the investigator to the identity of participants and making this an anonymous survey. Maintaining anonymity has been shown to increase research study participation in adult populations surveyed while waiting for clinic appointments (McPherson & Schwenka, 2004), during hospital admissions (Haas & Pazdernik, 2006), among military personnel during training (Trent et al., 2007), and among military personnel during the post-deployment readjustment period (Wright et al., 2005). The recruitment coordinator has participated in conducting research at other medical treatment facilities and is familiar with the conduct of research in clinical settings. The recruitment coordinator is not a military service member, thus enhancing study protocol fidelity that is maximized since relocation of this person is unlikely during the study.
period. In the unlikely event the recruitment coordinator is no longer employed at the DHC, the Deployment Health Psychologist and Program Manager (who is also not a military service member and unlikely to relocate during the study period) has agreed to support the utilization of another DHC staff member as a recruitment coordinator (Appendix B). The advantages to utilizing the DHC staff as the recruitment coordinator include efficiency, minimizing disruption of the post-deployment screening process, and the ability for participants to remain anonymous to the investigator.

**Screening and recruitment procedures.** Screening for inclusion in the study and recruitment will take place at the conclusion of the Navy mandated physical and psychological screening interview, which is recorded on DD FORM 2900 (PDHRA) and supplemented with the PCL-M form at the DHC. Responses on DD FORM 2900 and the PCL-M provide the interviewer with the necessary information to screen participants for study inclusion/exclusion. The recruitment coordinator (PA) will view the forms but not extract data to minimize the effort of the recruitment coordinator so as not to impact on their ability to complete their regular mission of identifying the physical and mental health needs of service members and referring them as necessary. Since the PA reviews the information on the 2900 and the PCL-M as part of the PDHRA interview, the amount of additional time to screen and recruit for study inclusion is expected to average between 2 - 3 minutes per participant. The recruitment coordinator will use the Participant Inclusion/Exclusion Screening Flow Sheet (Figure 1) to guide decisions on which service members meet study inclusion/exclusion criteria.

Recruiting service members using this method is expected to lead to a representative sample of the target population and to recruit service members who meet study inclusion/exclusion criteria (Butterfield et al., 2003).

**Informed Consent.** All service members who meet inclusion criteria will be provided with the participant information sheet (Appendix C) that contains a written description of the study including the study purpose, procedures, duration, risks, benefits, and the right to withdraw at any time without penalty. They will also be provided a list of deployment related resources (Appendix D), and a study packet that contains the study questionnaires (Appendix E). The recruitment coordinator will be trained to respond to service members’ questions or concerns about the study. The investigator will be available to the recruitment coordinator should there be a question or concern that cannot be addressed. Completing and returning the study questionnaires will serve as documentation of implied informed consent.

**Data Collection.** Once all questions and concerns are addressed, the recruitment coordinator will escort participants to a room that affords privacy and shown where to place the study packet when completed. Participants can decide to complete the study packet or not complete the study packet and place either the completed or the non completed forms in the locked file cabinet.

The investigator will collect completed surveys from the file cabinet at the end of each data collection day. This process will continue until 123 participants who meet inclusion criteria have completed the survey.
Written Quiz on Study Procedures

1. Circle all service members from the list below who are eligible to be screened for participation in this study:
   a. Navy personnel completing their Pre-deployment health screening.
   b. Navy personnel completing their 30-day post-deployment health screening.
   c. Navy personnel completing their 90-180 day post-deployment health screening.

2. My role in this study is to function as the recruitment coordinator.
   True or False

3. One advantage to using the DHC staff member as the recruitment coordinator is to blind the investigator to the identity of participants making this an anonymous survey.
   True or False

4. When will screening for inclusion in the study and recruitment take place?

5. Which documents will be used to obtain data on which to base inclusion/exclusion decisions?
   a. DD Form 2900
   b. PCL-M
   c. Participant Inclusion/Exclusion Screening Flow Sheet

6. Which documents will be used to guide decisions on which service members meet study inclusion/exclusion criteria?
   a. DD Form 2900
   b. PCL-M
   c. Participant Inclusion/Exclusion Screening Flow Sheet

7. All service members who meet inclusion criteria will be provided with the participant information sheet that contains a written description of the study including the study purpose, procedures, duration, risks, benefits, and the right to withdraw at any time without penalty.
   True or False

8. Circle all of the True statements from the list below:
   a. All service members who meet inclusion criteria will be provided a list of deployment related resources and a study packet that contains the study questionnaires.
   b. The recruitment coordinator will be trained to respond to service member’s questions or concerns about the study.
   c. Service member’s who have questions about the study will be referred to the principle investigator (LCDR Cunningham).
   d. Completing and returning the study questionnaires will serve as documentation of implied informed consent.

9. When will the recruitment coordinator escort participants to the data collection room?

10. When will service members make their decision to participate (complete or not complete the study packet questionnaires)?
Written Quiz on Study Procedures Answer Key
1. Circle all service members from the list below who are eligible to be screened for participation in this study: (correct response c)
   a. Navy personnel completing their Pre-deployment health screening.
   b. Navy personnel completing their 30-day post-deployment health screening.
   c. Navy personnel completing their 90-180 day post-deployment health screening.
2. My role in this study is to function as the recruitment coordinator.
   True or False
3. One advantage to using the DHC staff member as the recruitment coordinator is to blind the investigator to the identity of participants making this an anonymous survey.
   True or False
4. When will screening for inclusion in the study and recruitment take place?
   At the conclusion of the Navy mandated physical and psychological screening interview (PDHRA).
5. Which documents will be used to obtain data on which to base inclusion/exclusion decisions? (correct responses a and b)
   a. DD Form 2900
   b. PCL-M
   c. Participant Inclusion/Exclusion Screening Flow Sheet
6. Which documents will be used to guide decisions on which service members meet study inclusion/exclusion criteria? (correct response c.)
   a. DD Form 2900
   b. PCL-M
   c. Participant Inclusion/Exclusion Screening Flow Sheet
7. All service members who meet inclusion criteria will be provided with the participant information sheet that contains a written description of the study including the study purpose, procedures, duration, risks, benefits, and the right to withdraw at any time without penalty.
   True or False
8. Circle all of the True statements from the list below: (correct responses a,b, and d)
   a. All service members who meet inclusion criteria will be provided a list of deployment related resources and a study packet that contains the study questionnaires.
   b. The recruitment coordinator will be trained to respond to service member’s questions or concerns about the study.
   c. Service member’s who have questions about the study will be referred to the principle investigator (LCDR Cunningham).
   d. Completing and returning the study questionnaires will serve as documentation of implied informed consent.
9. When will the recruitment coordinator escort participants to the data collection room?
   Once all questions and concerns have been addressed.
10. When will service members make their decision to participate (complete or not complete the study packet questionnaires)?
    Once the recruitment coordinator has left the data collection room.
Participant Inclusion/Exclusion Screening Flow Sheet

Completing PDHRA?

- NO: Do NOT administer
- YES
  
  Active Duty Navy (DD FORM 2900, pg 1)?
  
  - NO: Do NOT administer
  - YES
    
    Does service member pose a current risk for harm to self or others (DD FORM 2900, pg 4, #3a)?
    
    - NO: Do NOT administer survey
    - YES
      
      Total PCL-M score ≥ 50?
      
      - NO
      - YES
        
        At least 1 reexperiencing symptom on PCL-M at moderate level or above? (item #s 1-5)
        
        - NO
        - YES
          
          At least 3 avoidant/numbing symptoms on PCL-M at moderate level or above? (item #s 6-12)
          
          - NO
          - YES
            
            At least 2 hyperarousal symptoms on PCL-M at moderate level or above? (item #s 13-17)
            
            - NO
            - YES
              
              Do NOT administer

Administer survey
Practice Forms (9 DD FORM 2900 and PCL-M forms with fictitious data that represent individuals that should and should not be included in the study)

This form must be completed electronically. Handwritten forms will not be accepted.

POST-DEPLOYMENT HEALTH RE-ASSESSMENT (PDHA)

PRIVACY ACT STATEMENT

AUTHORITY: 10 U.S.C. 135, 1074f, 3013, 5013, 8013 and E.O. 9397.

PRINCIPAL PURPOSE(S): To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care you may need. The information you provide may result in a referral for additional healthcare that may include medical, dental or behavioral healthcare or diverse community support services.

ROUTINE USE(S): In addition to those disclosures generally permitted under 5 U.S.C. 552(a) of the Privacy Act, to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

DISCLOSURE: Voluntary. If not provided, healthcare WILL be limited, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before selecting your response or marking your selection. You are encouraged to answer each question. Withholding or providing inaccurate information may impair a healthcare provider's ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help. Please respond based on your most recent deployment.

DEMOGRAPHICS

Last Name  
Sailor

Social Security Number  
123-45-6789

Date of Birth (dd/mm/yyyy)  
Sample

Gender  
Female

Other Male

Marital Status  
Married

Other Separated

Divorced

Widowed

Date arrived theater (dd/mm/yyyy)  
01 Jan 2010

Date departed theater (dd/mm/yyyy)  
15 Aug 2010

Status Prior to Deployment  
Active Duty

Selected Reserves - Reserve - Unit

Selected Reserves - Reserve - AGR

Selected Reserves - Reserve - IMA

Selected Reserves - National Guard - Unit

Selected Reserves - National Guard - AGR

Ready Reserves - IRR

Ready Reserves - IAC

Civilian Government Employee

Pay Grade  
E1

O1

W1

Other

Since return from deployment I have:  
Maintained/enlisted to previous status

Transferred to Selected Reserves

Transferred to IRR

Transferred to IMA

Retired from Military Service

Separated from Military Service

Current Unit of Assignment  
PDX

Current Assignment Location  
PDX

Location of Operation  
Iraq

Total Deployments in Past 5 Years:  
1

Current Contact Information:
Phone: 123-456-7890
Cell: 401-567-8901
DSN: 401-567-8902
Email: Sailor@navy.mil
Address: 123 Marine Way
        San Diego, CA 92124

Point of Contact who can always reach you:
Name: John Sailor
Phone: 123-456-7891
Email: John.Sailor@navy.mil
Mailing Address: 123 Marine Way
                San Diego, CA 92124

DD FORM 2900, JAN 2008

PREVIOUS EDITION IS OBSOLETE.
This form must be completed electronically. Handwritten forms will not be accepted.

**POST-DEPLOYMENT HEALTH RE-ASSESSMENT (PDHRA)**

**PRIVACY ACT STATEMENT**

**AUTHORITY:** 10 U.S.C. 135, 1074f, 3015, 5013, 8013 and E.O. 9397.

**PRINCIPAL PURPOSE:** To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care you may need. The information you provide may result in a referral for additional healthcare that may include medical, dental or behavioral healthcare or diverse community support services.

**ROUTINE USE(S):** In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

**DISCLOSURE:** Voluntary. If not provided, healthcare WILL BE Limited, but comprehensive care may not be possible.

**INSTRUCTIONS:** Please read each question completely and carefully before entering your response or marking your selection. **YOU ARE ENCOURAGED TO ANSWER EACH QUESTION.** Withholding or providing inaccurate information may impair a healthcare provider’s ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help. Please respond based on your MOST RECENT DEPLOYMENT.

### DEMOGRAPHICS

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Middle Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sailor</td>
<td>Joe</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Security Number</th>
<th>Date of Birth (dd/mm/yyyy)</th>
<th>Today's Date (dd/mm/yyyy)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date arrived theater (dd/mm/yyyy)</th>
<th>Date departed theater (dd/mm/yyyy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Jan 2010</td>
<td>15 Aug 2010</td>
</tr>
</tbody>
</table>

### Gender

- Male
- Female
- Navy
- Marine Corps
- Coast Guard
- Civilian Employee
- Other

### Status Prior to Deployment

- Active Duty
- Selected Reserves - Reserve - Unit
- Selected Reserves - Reserve - AGR
- Selected Reserves - Reserve - IMA
- Selected Reserves - National Guard - Unit
- Selected Reserves - National Guard - AGR
- Ready Reserves - RRA
- Ready Reserves - RSG
- Civilian Government Employee
- Other

### Location of Operation

<table>
<thead>
<tr>
<th>Country 1</th>
<th>Country 2</th>
<th>Country 3</th>
<th>Country 4</th>
<th>Country 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Months 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total Deployments in Past 5 Years:

<table>
<thead>
<tr>
<th>QRF</th>
<th>QRF</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5 or more</td>
<td>5 or more</td>
<td></td>
</tr>
</tbody>
</table>

### Pay Grade

- E1
- O1
- W1
- E2
- O2
- W2
- E3
- O3
- W3
- E4
- O4
- W4
- E5
- O5
- W5
- E6
- O6
- E7
- O7
- Other
- E8
- O8
- E9
- O9
- E10

### Since return from deployment i have:

- Maintained/Retained to previous status
- Transferred to Selected Reserves
- Transferred to RRA
- Transferred to RSG
- Retired from Military Service
- Separated from Military Service

### Current Unit of Assignment

| NAS JAX |

### Current Assignment Location

NAS JAX

### Current Contact Information

- Phone: 123-456-7891
- Cell: 456-789-0123
- DSN: 456-789-0123
- Email: sails@navy.mil
- Address: 123 Navy Way, Annapolis, MD 21402-5127

### Point of Contact who can always reach you:

- Name: John Sailor
- Phone: 321-456-7898
- Email: jahsailor@navy.mil
- Mailing Address: 123 Navy Way, Annapolis, MD 21402

**DD FORM 2900, JAN 2008**

**PREVIOUS EDITION IS OBSOLETE.**
This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number: ____________________________ Date (dd/mm/yyyy):

Health Care Provider Only

Provider Review and Interview

1. Review symptoms and deployment concerns identified on form:
   ● Confirmed screening results as reported
   ○ Screening results modified, amended, clarified during interview.

   a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way?  ○ Yes  ○ No
      If YES, about how often have you been bothered by these thoughts?
      ○ Very few days  ○ More than half of the time  ○ Nearly every day
   b. Since return from your deployment, have you had thoughts or concerns that you might hurt or lose control with someone?  ○ Yes  ○ No  ○ Unsure

3. If member reports positive or unsure response to 2a. or 2b., conduct risk assessment.
   a. Does member pose a current risk for harm to self or others?  ○ No, not a current risk  ○ Yes, poses a current risk  ○ Unsure
   b. Outcome of assessment:
      ○ Immediate referral  ○ Routine follow-up referral  ○ Referral not indicated

4. Alcohol screening results
   ● No evidence of alcohol-related problems
   ○ Potential alcohol problems (positive response to either question 13a. or 13b. and/or AUDIT-C questions 13c.-e.) score of 4 or more for men or 3 or more for women; refer to PCM for evaluation.  ○ Yes  ○ No

5. Traumatic Brain Injury (TBI) risk assessment
   ● No evidence of risk based on responses to questions 9a. - d.
      ○ Potential TBI with persistent symptoms, based on responses to question 9d; refer for additional evaluation.  ○ Yes  ○ No

6. Record additional questions or concerns identified by patient during interview:


DD FORM 2900, JAN 2006
PCL-M

**INSTRUCTIONS:** Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th><strong>Repeated, disturbing memories, thoughts, or images of a stressful military experience?</strong></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><strong>Repeated, disturbing dreams of a stressful military experience?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td><strong>Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td><strong>Feeling very upset when something reminded you of a stressful military experience?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td><strong>Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful military experience?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td><strong>Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td><strong>Avoiding activities or situations because they reminded you of a stressful military experience?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td><strong>Trouble remembering important parts of a stressful military experience?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td><strong>Loss of interest in activities that you used to enjoy?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td><strong>Feeling distant or cut off from other people?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td><strong>Feeling emotionally numb or being unable to have loving feelings for those close to you?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td><strong>Feeling as if your future will somehow be cut short?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td><strong>Trouble falling or staying asleep?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td><strong>Feeling irritable or having angry outbursts?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td><strong>Having difficulty concentrating?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td><strong>Being &quot;super-alert&quot; or watchful or on guard?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td><strong>Feeling jumpy or easily startled?</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

PCL-M for DSM-IV (11/94) Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division
This form must be completed electronically. Handwritten forms will not be accepted.

POST-DEPLOYMENT HEALTH RE-ASSESSMENT (PDHRA)

PRIVACY ACT STATEMENT

AUTHORITY: 10 U.S.C. 139, 1074f, 3031, 5013, 8013 and E.O. 9397.

PRINCIPAL PURPOSE(S): To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing prompt and future medical care you may need. The information you provide may result in a referral for additional healthcare that may include medical, dental or behavioral healthcare or diverse community support services.

ROUTINE USE(S): In addition to those disclosures generally permitted under 5 U.S.C. 552a(e) of the Privacy Act, to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

DISCLOSURE: Voluntary. If not provided, healthcare WILL be furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before entering your response or marking your selection. You are encouraged to answer each question. Withholding or providing inaccurate information may impair a healthcare provider's ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help. Please respond based on your most recent deployment.

DEMOGRAPHICS

Last Name:  
First Name:  
Middle Initial:  
Social Security Number: 123-45-6789  
Date of Birth (dd/mm/yyyy):  
Today's Date (dd/mm/yyyy): 15 DEC 2010  
Date arrived theater (dd/mm/yyyy): 01 JAN 2010  
Date departed theater (dd/mm/yyyy): 15 AUG 2010

Gender:  
- Male  
- Female

Marital Status:  
- Never Married  
- Married  
- Separated  
- Divorced  
- Widowed

Service Branch:  
- Air Force  
- Army  
- Navy  
- Marine Corps  
- Coast Guard  
- Civilian Employee  
- Other

Location of Operation:  
To what areas were you mainly deployed (land-based operations more than 30 days)? Please mark all that apply, including the number of months spent at each location.
- Country 1  
- Country 2  
- Country 3  
- Country 4  
- Country 5  

Total Deployments in Past 8 Years:  
- 1  
- 2  
- 3  
- 4  
- 5 or more

Employment Status:  
- Active Duty  
- Selected Reserves - Reserve - Unit  
- Selected Reserves - Reserve - AGR  
- Selected Reserves - Reserve - IM  
- Selected Reserves - National Guard - Unit  
- Selected Reserves - National Guard - AGR  
- Ready Reserves - IRR  
- Ready Reserves - ING  
- Civilian Government Employee  
- Other

Since return from deployment I have:  
- Maintained/returned to previous status  
- Transferred to Selected Reserves  
- Transferred to IRR  
- Transferred to ING  
- Retired from Military Service  
- Separated from Military Service

Current Unit of Assignment:  
- 8-3 S
c
Current Assignment Location: NAVAL STATION

Pay Grade:  
- E1  
- E2  
- E3  
- E4  
- E5  
- E6  
- E7  
- E8  
- E9  
- E10

DoD Form 2500, Jan 2008

PREVIOUS EDITION IS OBSOLETE.
Practice Form - Fictitious Participant # 2

This form must be completed electronically. Handwritten forms will not be accepted.

Service Member’s Social Security Number: __________________________
Date (dd/mm/yyyy): __________________________

Health Care Provider Only
Provider Review and Interview

1. Review symptoms and deployment concerns identified on form:
   ○ Confirmed screening results as reported
   ○ Screening results modified, amended, clarified during interview.

   a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way?
      ○ Yes    ○ No
      If YES, about how often have you been bothered by these thoughts?
      ○ Very few days    ○ More than half of the time    ○ Nearly every day
   b. Since return from your deployment, have you had thoughts or concerns that you might hurt or lose control with someone?
      ○ Yes    ○ No    ○ Unsure

3. If member reports positive or unsure response to 2a. or 2b., conduct risk assessment.
   a. Does member pose a current risk for harm to self or others?
      ○ No, not a current risk    ○ Yes, poses a current risk
      b. Outcome of assessment
      ○ Immediate referral    ○ Routine follow-up referral    ○ Referral not indicated

4. Alcohol screening result:
   ○ No evidence of alcohol-related problems
   ○ Potential alcohol problem (positive response to either question 13a. or 13b. and/or AUDIT C (questions 13c. - d.) score of 4 or more for men or 3 or more for women).
      Refer to PCCM for evaluation.
      ○ Yes    ○ No

5. Traumatic Brain Injury (TBI) risk assessment:
   ○ No evidence of risk based on responses to questions 9.a. - d.
   ○ Potential TBI with persistent symptoms, based on responses to question 9d.
      Refer for additional evaluation.
      ○ Yes    ○ No

6. Record additional questions or concerns identified by patient during interview:

DD FORM 2900, JAN 2008
Page 4 of 5 Pages
**Practice Form - Fictitious Participant # 2**

**PCL-M**

**INSTRUCTIONS:** Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repeated, disturbing memories, thoughts, or images of a stressful military experience?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Repeated, disturbing dreams of a stressful military experience?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Feeling very upset when something reminded you of a stressful military experience?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful military experience?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Avoiding activities or situations because they reminded you of a stressful military experience?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Trouble remembering important parts of a stressful military experience?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Loss of interest in activities that you used to enjoy?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Feeling distant or cut off from other people?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Feeling as if your future will somehow be cut short?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Trouble falling or staying asleep?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Feeling irritable or having angry outbursts?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Having difficulty concentrating?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Being &quot;super-alert&quot; or watchful or on guard?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Feeling jumpy or easily startled?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PCL-M for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division

128
This form must be completed electronically. Handwritten forms will not be accepted.

POST-DEPLOYMENT HEALTH ASSESSMENT (PDHA)


PRINCIPAL PURPOSE(S): To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care you may need. The information you provide may result in a referral for additional healthcare that may include medical, dental or behavioral healthcare or diverse community support services.

ROUTINE USE(S): In addition to these disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment. Responses may be used to guide possible referrals.

DISCLOSURE: Voluntary. If not provided, healthcare WILL BE furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before entering your response or marking your selection. YOU ARE ENCOURAGED TO ANSWER EACH QUESTION. ANSWERING THESE QUESTIONS WILL NOT DELAY YOUR RETURN HOME. Withholding or providing inaccurate information may impair a healthcare provider's ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help.

SAMPLE

DEMOGRAPHICS
Last Name: Seller
First Name: Joe
Middle Initial: A
Social Security Number: 123-45-6789
Date of Birth (dd/mm/yyyy): 01/22/1985
Gender: Male

Service Branch: Air Force
Component: Active Duty
Pay Grade: O1

Name of Your Unit during this Deployment:
Date of arrival in theater (dd/mm/yyyy): 01/01/2010
Date of departure from theater (dd/mm/yyyy): 01/31/2010
Name of Operation: OEF

Location of Operation: From which area were you mainly deployed (air-based operations for more than 30 days)?
Country 1: Afghanistan
Time at location (months): 9.5
Country 2: 
Time at location (months): 
Country 3: 
Time at location (months): 
Country 4: 
Time at location (months): 
Country 5: 
Time at location (months): 

Occupational specialty during this deployment (MOS/SCO, NEC/VOB, or AVOC): 

Combat specialty:

Current Contact Information:
Phone: 123-456-7891
Cell: 994-456-7234
Email: Joe.Seller@Mail.mil
Address: 123 Main Road, Anytown, USA 56789

Point of Contact who can always reach you:
Name: John Seller
Phone: 321-456-7890
Email: John.Seller@Mail.mil
Mailing Address: 123 Main Road, Anytown, USA 56789

DD FORM 2796, JAN 2008
PREVIOUS EDITION IS OBSOLETE.
This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number:

Health Care Provider Only

Post-Deployment Health Care Provider Review, Interview, and Assessment

1. Do you have any medical or dental problems that developed during this deployment? □ Yes □ No
   If yes, are the problems still bothering you now? □ Yes □ No

2. Are you currently on a profile (or LIMDU) that restricts your activities (light or limited duty)? □ Yes □ No
   If yes: For what reason? □ NA
   Is your condition due to an injury or illness that occurred during the deployment? □ Yes □ No □ NA
   Did you have similar problems prior to deployment? □ Yes □ No □ NA
   If so, did your condition worsen during the deployment? □ Yes □ No □ NA

3. Ask the following behavioral risk questions. Conduct risk assessment as necessary.
   a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way? □ Yes □ No
      If YES, about how often have you been bothered by those thoughts? □ A few days □ More than half of the time □ Nearly every day
   b. Over the PAST MONTH, have you had thoughts or concerns that you might hurt or lose control with someone? □ Yes □ No □ Unsure

4. If member reports YES or UNSURE responses to 3.a. or 3.b., conduct risk assessment.
   a. Does member pose a current risk for harm to self or others? □ No, not a current risk □ Yes, poses a current risk □ Unsure
   b. Outcome of assessment □ Immediate referral □ Routine follow-up referral □ Referral not indicated

5. Alcohol screening result
   □ No evidence of alcohol-related problems
   □ Potential alcohol problem (positive response to either question 15.a. or 15.b. and/or AUDIT-C (questions 15.c.e.i.))
   Refer to PCM for evaluation. □ Yes □ No

6. During this deployment have you sought, or do you now intend to seek, counseling or care for your mental health? □ Yes □ No

7. Traumatic Brain Injury (TBI) risk assessment
   □ No evidence of risk based on responses to questions 9.a. - d.
   □ Potential TBI with persistent symptoms, based on responses to question 9.a.
   Refer for additional evaluation. □ Yes □ No

8. Tuberculosis risk assessment, based on response to question 20.
   □ Minimal risk
   □ Increased risk
   Recommend tuberculosis skin testing in 60-90 days □ Yes □ No

9. Depleted Uranium (DU) risk assessment, based on responses to question 16 (DU, Yes) or question 18 (Yes).
   □ No evidence of exposure to depleted uranium
   □ Potential exposure to depleted uranium
   Refer to PCM for completion of DD Form 2872 and possible 24-hour urinalysis. □ Yes □ No

10. Do you have any other concerns about possible exposures or events during this deployment that you feel may affect your health? □ Yes □ No
    Please list your concerns:

11. Do you currently have any questions or concerns about your health?
    Please list your concerns:

DD FORM 2798, JAN 2008
### PCL-M

**Instructions:** Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repeated, disturbing memories, thoughts, or images of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Repeated, disturbing dreams of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Feeling very upset when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Avoiding activities or situations because they reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Trouble remembering important parts of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Loss of interest in activities that you used to enjoy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Feeling distant or cut off from other people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Feeling as if your future will somehow be cut short?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Trouble falling or staying asleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Feeling irritable or having angry outbursts?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Having difficulty concentrating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Being &quot;super-alert&quot; or watchful or on guard?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Feeling jumpy or easily startled?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**PCL-M for DSM-IV (11/1/94)** Weathers, Litz, Huska, & Keane

**National Center for PTSD - Behavioral Science Division**
This form must be completed electronically. Handwritten forms will not be accepted.

POST-DEPLOYMENT HEALTH RE-ASSESSMENT (PDHRA)

PRIVACY ACT STATEMENT


PRINCIPAL PURPOSE(S): To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care you may need. The information you provide may result in a referral for additional healthcare that may include medical, dental or behavioral healthcare or diverse community support services.

ROUTINE USE(S): In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

DISCLOSURE: Voluntary. If not provided, healthcare WILL BE furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before entering your response or marking your selection. YOU ARE ENCOURAGED TO ANSWER EACH QUESTION. Withholding or providing inaccurate information may impair a healthcare provider’s ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help. Please respond based on your MOST RECENT DEPLOYMENT.

DEMOGRAPHICS

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Middle Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>ailer</td>
<td>Joe</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Security Number</th>
<th>Date of Birth (dd/mm/yyyy)</th>
<th>Today's Date (dd/mm/yyyy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>123-45-6789</td>
<td>15-Jan-2010</td>
<td>15-Oct-2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Service Branch</th>
<th>Marital Status</th>
<th>Status Prior to Deployment</th>
<th>Pay Grade</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>All Force</td>
<td>Never Married</td>
<td>Active Duty</td>
<td>E1</td>
<td>Name: John Doe</td>
</tr>
<tr>
<td>Female</td>
<td>Army</td>
<td>Married</td>
<td>Selected Reserves - Reserve - Unit</td>
<td>E2</td>
<td>Phone: 123-456-7890</td>
</tr>
<tr>
<td>Navy</td>
<td>Marine Corps</td>
<td>Separated</td>
<td>Selected Reserves - Reserve - AGR</td>
<td>E3</td>
<td>Cell: 456-789-0123</td>
</tr>
<tr>
<td></td>
<td>Marine Corps</td>
<td>Widowed</td>
<td>Selected Reserves - Reserve - INR</td>
<td>E4</td>
<td>DSN: 123-456-7890</td>
</tr>
<tr>
<td>Coast Guard</td>
<td>Civilian Employee</td>
<td></td>
<td>Selected Reserves - National Guard - Unit</td>
<td>E5</td>
<td>Email: <a href="mailto:johndoe@email.com">johndoe@email.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ready Reserves - INR</td>
<td>E6</td>
<td>Address: 123 Main St, Anytown, CA 12345</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Civilian Government Employee</td>
<td>E7</td>
<td>Point of Contact: 123 Home Way, Anytown, CA 12345</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other</td>
<td>E8</td>
<td>Name: John Doe</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>E9</td>
<td>Phone: 123-456-7890</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>E10</td>
<td>Email: <a href="mailto:johndoe@email.com">johndoe@email.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mailing Address: 123 Home Way, Anytown, CA 12345</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location of Operation</th>
<th>Since return from deployment I have:</th>
<th>Current Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country 1</td>
<td>Maintained/returned to previous status</td>
<td>Name: John Doe</td>
</tr>
<tr>
<td>Country 2</td>
<td>Transferred to Selected Reserves</td>
<td>Phone: 123-456-7890</td>
</tr>
<tr>
<td>Country 3</td>
<td>Transferred to IRR</td>
<td>Cell: 456-789-0123</td>
</tr>
<tr>
<td>Country 4</td>
<td>Transferred to INR</td>
<td>DSN: 123-456-7890</td>
</tr>
<tr>
<td>Country 5</td>
<td>Retired from Military Service</td>
<td>Email: <a href="mailto:johndoe@email.com">johndoe@email.com</a></td>
</tr>
<tr>
<td>3 months</td>
<td></td>
<td>Address: 123 Main St, Anytown, CA 12345</td>
</tr>
<tr>
<td>6 months</td>
<td></td>
<td>Point of Contact: 123 Home Way, Anytown, CA 12345</td>
</tr>
<tr>
<td>9 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 months</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Deployments in Past 5 Years:

<table>
<thead>
<tr>
<th>OIF</th>
<th>OIF</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>5 or more</td>
<td>5 or more</td>
<td>more</td>
</tr>
</tbody>
</table>

DD FORM 2900, JAN 2008

PREVIOUS EDITION IS OBSOLETE.
This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number: __________________________ Date (dd/mm/yyyy):

Health Care Provider Only

Provider Review and Interview

1. Review symptoms and deployment concerns identified on form:
   - ○ Confirmed screening results as reported
   - ○ Screening results modified, amended, clarified during interview

   a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way?
      ○ Yes  ○ No

   b. Since return from your deployment, have you had thoughts or concerns that you might hurt or lose control with someone?
      ○ Yes  ○ No  ○ Unsure

3. If member reports positive or unsure response to 2a. or 2b., conduct risk assessment.
   a. Does member pose a current risk for harm to self or others?
      ○ No, not a current risk  ○ Yes, poses a current risk  ○ Unsure

   b. Outcome of assessment
      ○ Immediate referral  ○ Routine follow-up referral  ○ Referral not indicated

4. Alcohol screening results
   ○ No evidence of alcohol-related problems
   ○ Potential alcohol problem (positive response to either question 13a. or 13b. and/or AUDIT-C [questions 13c.-e.])
      score of 4 or more for men or 3 or more for women.
      Refer to PCM for evaluation.
      ○ Yes  ○ No

5. Traumatic Brain Injury (TBI) risk assessment
   ○ No evidence of risk based on responses to questions 9a. - d.
   ○ Potential TBI with persistent symptoms, based on responses to question 9d.
      Refer for additional evaluation.
      ○ Yes  ○ No

6. Record additional questions or concerns identified by patient during interview:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

DD FORM 2900, JAN 2008
### PCL-M

**Instructions:** Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Repeated, disturbing memories, thoughts, or images of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3?</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Repeated, disturbing dreams of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>Feeling very upset when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>Avoiding activities or situations because they reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>Trouble remembering important parts of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>Loss of interest in activities that you used to enjoy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>Feeling distant or cut off from other people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td>Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td>Feeling as if your future will somehow be cut short?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td>Trouble falling or staying asleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14.</td>
<td>Feeling irritable or having angry outbursts?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15.</td>
<td>Having difficulty concentrating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16.</td>
<td>Being &quot;super-aware&quot; or watchful or on guard?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17.</td>
<td>Feeling jumpy or easily startled?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**PCL-M for DSM-IV (11/7/94)** Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division
This form must be completed electronically. Handwritten forms will not be accepted.

POST-DEPLOYMENT HEALTH RE-ASSESSMENT (PDHRA)

PRIVACY ACT STATEMENT

AUTHORITY: 10 U.S.C. 138, 1074f, 3012, 3013, 3013, 8013 and E.O. 9397.

PRINCIPAL PURPOSE(S): To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing current and future medical care you may need. The information you provide may result in a referral for additional healthcare that may include medical, dental or behavioral healthcare or diverse community support services.

ROUTINE USE(S): In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

DISCLOSURE: Voluntary. If not provided, healthcare WILL BE furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before entering your response or marking your selection. YOU ARE ENCOURAGED TO ANSWER EACH QUESTION. Withholding or providing inaccurate information may impair a healthcare provider's ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help. Please respond based on your MOST RECENT DEPLOYMENT.

DEMOGRAPHICS

Last Name
First Name
Middle Initial
Social Security Number
Date of Birth (dd/mm/yyyy)
Date arrived theater (dd/mm/yyyy)
Gender
Service Branch
Marital Status

Pay Grade

Location of Operation
To what areas were you mainly deployed (land-based operations more than 30 days)? Please mark all that apply, including the number of months spent at each location.

Country

Total Deployments in Past 5 Years:

Current Unit of Assignment

Current Assignment Location

Since return from deployment I have:

Name:
Phone:
Email:
Postal Address:

Point of Contact who can always reach you:

PREVIOUS EDITION IS OBSOLETE.
This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number: ____________________________ Date: ________________

Health Care Provider Only

Provider Review and Interview

1. Review symptoms and deployment concerns identified on form:
   - Confirmed screening results as reported
   - Screening results modified, amended, clarified during interview.

   a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way?
      - IF YES, about how often have you been bothered by these thoughts?
        - Very few days
        - More than half of the time
        - Nearly every day
   b. Since return from your deployment, have you had thoughts or concerns that you might hurt or lose control with someone?
      - Yes
      - No
      - Unsure

3. If member reports positive or unsure response to 2a. or 2b., conduct risk assessment.
   a. Does member pose a current risk for harm to self or others?
      - No, not a current risk
      - Yes, poses a current risk
      - Unsure
   b. Outcome of assessment
      - Immediate referral
      - Routine follow-up referral
      - Referral not indicated

4. Alcohol screening result:
   - No evidence of alcohol-related problems
   - Potential alcohol problem (positive response to either question 13a. or 13b. and/or AUDIT-C questions 13c. - e.) score of 4 or more for men or 3 or more for women.
      - Refer to PCM for evaluation.
          - Yes
          - No

5. Traumatic Brain Injury (TBI) risk assessment
   - No evidence of risk based on responses to questions 9a. - d.
   - Potential TBI with persistent symptoms, based on responses to question 9d.
      - Refer for additional evaluation.
          - Yes
          - No

6. Record additional questions or concerns identified by patient during interview:

DD FORM 2800, JAN 2008

Page 4 of 5 Pages
**PCL-M**

**INSTRUCTIONS:** Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repeated, disturbing memories, thoughts, or images of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Repeated, disturbing dreams of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Feeling very upset when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Avoiding activities or situations because they reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Trouble remembering important parts of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Loss of interest in activities that you used to enjoy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Feeling distant or cut off from other people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Feeling as if your future will somehow be cut short?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Trouble falling or staying asleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Feeling irritable or having angry outbursts?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Having difficulty concentrating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Being &quot;super-alert&quot; or watchful or on guard?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Feeling jumpy or easily startled?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**PCL-M for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division**
This form must be completed electronically. Handwritten forms will not be accepted.

POST-DEPLOYMENT HEALTH RE-ASSESSMENT (PDHRA)

PRIVACY ACT STATEMENT


PRINCIPAL PURPOSE(S): To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care you may need. The information you provide may result in referral for additional healthcare that may include medical, dental or behavioral healthcare or diverse community support services.

ROUTINE USE(S): In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

DISCLOSURE: Voluntary. If not provided, healthcare WILL BE furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before entering your response or marking your selection. YOU ARE ENCOURAGED TO ANSWER EACH QUESTION. Withholding or providing inaccurate information may impair a healthcare provider's ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help. Please respond based on your MOST RECENT DEPLOYMENT.

DEMOGRAPHICS

<table>
<thead>
<tr>
<th>Last Name</th>
<th>Sailo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security Number</td>
<td>123-45-6789</td>
</tr>
<tr>
<td>Date arrived theater</td>
<td>01 Jan 2012</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
</tr>
<tr>
<td>Service Branch</td>
<td>Air Force</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Never Married</td>
</tr>
<tr>
<td>Date of Birth (mm/dd/yyyy)</td>
<td>Sample</td>
</tr>
<tr>
<td>Date departed theater (mm/dd/yyyy)</td>
<td>15 Dec 2012</td>
</tr>
<tr>
<td>Pay Grade</td>
<td>W1</td>
</tr>
<tr>
<td>Status Prior to Deployment</td>
<td>Active Duty</td>
</tr>
<tr>
<td>Location of Operation</td>
<td>To what areas were you mainly deployed (land based operations more than 30 days)? Please mark all that apply, including the number of months spent at each location.</td>
</tr>
<tr>
<td>Country 1</td>
<td>Month 1</td>
</tr>
<tr>
<td>Country 2</td>
<td>Month 2</td>
</tr>
<tr>
<td>Country 3</td>
<td>Month 3</td>
</tr>
<tr>
<td>Country 4</td>
<td>Month 4</td>
</tr>
<tr>
<td>Country 5</td>
<td>Month 5</td>
</tr>
<tr>
<td>Total Deployments In Past 5 Years:</td>
<td>GGF 30, 50, or 70</td>
</tr>
<tr>
<td>Current Unit of Assignment</td>
<td>VID-30</td>
</tr>
<tr>
<td>Current Assignment Location</td>
<td>NRs Jan</td>
</tr>
<tr>
<td>Pay Grade</td>
<td>W1</td>
</tr>
<tr>
<td>Status Prior to Deployment</td>
<td>Active Duty</td>
</tr>
<tr>
<td>Location of Operation</td>
<td>To what areas were you mainly deployed (land based operations more than 30 days)? Please mark all that apply, including the number of months spent at each location.</td>
</tr>
<tr>
<td>Country 1</td>
<td>Month 1</td>
</tr>
<tr>
<td>Country 2</td>
<td>Month 2</td>
</tr>
<tr>
<td>Country 3</td>
<td>Month 3</td>
</tr>
<tr>
<td>Country 4</td>
<td>Month 4</td>
</tr>
<tr>
<td>Country 5</td>
<td>Month 5</td>
</tr>
<tr>
<td>Total Deployments In Past 5 Years:</td>
<td>GGF 30, 50, or 70</td>
</tr>
<tr>
<td>Current Unit of Assignment</td>
<td>VID-30</td>
</tr>
<tr>
<td>Current Assignment Location</td>
<td>NRs Jan</td>
</tr>
</tbody>
</table>

PREVIOUS EDITION IS OBSOLETE.

Page 1 of 5 Pages
Adobe Professional 7.0
This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number: 

Data (dd/mm/yyyy):

Health Care Provider Only

Provider Review and Interview

1. Review symptoms and deployment concerns identified on form:
   - Confirmed screening results as reported
   - Screening results modified, amended, clarified during interview.

   a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead
      or of hurting yourself in some way?
         ○ Yes
         ○ No
      IF YES, about how often have you been bothered by these thoughts?
         ○ Very few days
         ○ More than half of the time
         ○ Nearly every day
   b. Since return from your deployment, have you had thoughts or concerns that
      you might hurt or lose control with someone?
         ○ Yes
         ○ No
         ○ Unsure

3. If member reports positive or unsure response to 2a. or 2b., conduct risk assessment.
   a. Does member pose a current risk for harm to self or others?
      ○ No, not a current risk
      ○ Yes, poses a current risk
      ○ Unsure
   b. Outcome of assessment
      ○ Immediate referral
      ○ Routine follow-up referral
      ○ Referral not indicated

4. Alcohol screening result
   ○ No evidence of alcohol-related problems.
   ○ Potential alcohol problem (positive responses to either question 13a. or 13b. and/or AUDIT-C (questions 13c.-e.)
     scores of 4 or more for men or 3 or more for women)
     Refer to PGM for evaluation.
     ○ Yes
     ○ No

5. Traumatic Brain Injury (TBI) risk assessment
   ○ No evidence of risk based on responses to questions 9a. - d.
   ○ Potential TBI with persistent symptoms, based on responses to question 9d.
     Refer for additional evaluation.
     ○ Yes
     ○ No

6. Record additional questions or concerns identified by patient during interview:


DD FORM 2900, JAN 2008
## PCL-M

**Instructions:** Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repeated, disturbing memories, thoughts, or images of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Repeated, disturbing dreams of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Feeling very upset when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Avoiding activities or situations because they reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Trouble remembering important parts of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Loss of interest in activities that you used to enjoy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Feeling distant or cut off from other people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Feeling as if your future will somehow be cut short?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Trouble falling or staying asleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Feeling irritable or having angry outbursts?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Having difficulty concentrating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Being &quot;super-alert&quot; or watchful or on guard?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Feeling jumpy or easily startled?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

PCL-M for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division
This form must be completed electronically. Handwritten forms will not be accepted.

POST-DEPLOYMENT HEALTH RE-ASSESSMENT (PDHRA)

PRIVACY ACT STATEMENT

AUTHORITY: 10 U.S.C. 136, 1074b, 3013, 5013, 8013 and E.O. 9397.

PRINCIPAL PURPOSE(S): To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care you may need. The information you provide may result in a referral for additional healthcare that may include medical, dental or behavioral health care or diverse community support services.

ROUTINE USE(S): In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

DISCLOSURE: Voluntary. If not provided, healthcare WILL BE furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before entering your response or marking your selection. YOU ARE ENCOURAGED TO ANSWER EACH QUESTION. Withholding or providing inaccurate information may impair a healthcare provider’s ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help. Please respond based on your MOST RECENT DEPLOYMENT.

DEMOGRAPHICS

Last Name

SAILOR

Social Security Number

123-45-6789

Date of Birth (ddmmyyyy)

15 JAN 2010

Date arrived theater (ddmmyyyy)

15 JAN 2010

Gender

Male

Female

Service Branch

Air Force

Army

Navy

Marine Corps

Coast Guard

Civilian Employee

Other

Marital Status

Never Married

Married

Separated

Divorced

Widowed

Pay Grade

E1

E2

E3

E4

E5

E6

E7

E8

E9

E10

Location of Operation

To what areas were you mainly deployed (land-based operations more than 30 days)? Please mark all that apply, including the number of months spent at each location.

Country 1

Month

Country 2

Month

Country 3

Month

Country 4

Month

Country 5

Month

Total Deployments in Past 5 Years:

OFF

1

2

3

4

5 or more

OFF

1

2

3

4

5 or more

Other

Other

Other

Other

Other

Other

1st Overseas

2nd Overseas

3rd Overseas

4th Overseas

5th Overseas

Current Unit of Assignment

NAS PAY

Current Assignment Location

NAS PAY

Current Contact Information:

Phone: 123-456-7890

Email: sailordoe@navy.mil

Address: 123 Main St., Any Town, USA 12345

Point of Contact who can always reach you:

Name: John Doe

Phone: 123-456-7890

Email: sailordoe@navy.mil

Mailing Address: 123 Main St., Any Town, USA 12345

PREVIOUS EDITION IS OBSOLETE.
This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number: ______________________________

Date (dd/mm/yyyy): __________

Health Care Provider Only

Provider Review and Interview

1. Review symptoms and deployment concerns identified on form:
   - Confirmed screening results as reported
   - Screening results modified, amended, clarified during interview

   a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way?
      - Yes
      - No
      - Very few days
      - More than half of the time
      - Nearly every day
   b. Since return from your deployment, have you had thoughts or concerns that you might hurt or lose control with someone?
      - Yes
      - No
      - Unsure

3. If member reports positive or unsure response to 2a. or 2b., conduct risk assessment.
   a. Does member pose a current risk for harm to self or others?
      - No, not a current risk
      - Yes, poses a current risk
      - Unsure
   b. Outcome of assessment
      - Immediate referral
      - Routine follow-up referral
      - Referral not indicated

4. Alcohol screening results
   - No evidence of alcohol-related problems
   - Potential alcohol problem (positive response to either question 13a. or 13b. and/or AUDIT-C (questions 13c.-d.) score of 4 or more for men or 3 or more for women).
   - Refer to PCM for evaluation
      - Yes
      - No

5. Traumatic Brain Injury (TBI) risk assessment
   - No evidence of risk based on responses to questions 9a.-d.
   - Potential TBI with persistent symptoms, based on responses to question 9d.
   - Refer for additional evaluation
      - Yes
      - No

6. Record additional questions or concerns identified by patient during interview:


DO FORM 2900, JAN 2008
PCL-M

INSTRUCTIONS: Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repeated, disturbing memories, thoughts, or images of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Repeated, disturbing dreams of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Feeling very upset when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Avoiding activities or situations because they reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Trouble remembering important parts of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Loss of interest in activities that you used to enjoy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Feeling distant or cut off from other people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Feeling as if your future will somehow be cut short?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Trouble falling or staying asleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Feeling irritable or having angry outbursts?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Having difficulty concentrating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Being 'super-alert' or watchful or on guard?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Feeling jumpy or easily startled?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

PCL-M for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division
This form must be completed electronically. Handwritten forms will not be accepted.

POST-DEPLOYMENT HEALTH RE-ASSESSMENT (PDHRA)

PRIVACY ACT STATEMENT

AUTHORITY: 10 U.S.C. 156, 1074; 303, 5013, 6013 and E.O. 9367.

PRINCIPAL PURPOSE(S): To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care you may need. The information you provide may result in a referral for additional healthcare that may include medical, dental or behavioral healthcare or diverse community support services.

ROUTINE USE(S): In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

DISCLOSURE: Voluntary. If not provided, healthcare WILL BE furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before entering your response or marking your selection. YOU ARE ENCOURAGED TO ANSWER EACH QUESTION. Withholding or providing inaccurate information may impair a healthcare provider’s ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help. Please respond based on your MOST RECENT DEPLOYMENT.

DEMOGRAPHICS

Last Name: 
First Name: J
Middle Initial: A

Social Security Number: 123-45-6789
Date of Birth (dd/mm/yyyy): 
Date arrived theater (dd/mm/yyyy): 6/1/2010
Date departed theater (dd/mm/yyyy): 15/8/2010

Gender: Male
Female

Service Branch: Air Force
Army
Navy
Maritme Corps
Coast Guard
Civilian/Employee
Other

Marital Status: Never Married
Married
Separated
Divorced
Widowed

Location of Operation:
To what areas were you mainly deployed (land-based operations more than 30 days)? Please mark all that apply, including the number of months spent at each location.

Country 1: 
Months 8
Country 2: 
Months
Country 3: 
Months
Country 4: 
Months
Country 5: 
Months

Total Deployments in Past 5 Years:

Countries: 1

Since return from deployment I have:

Maintained/returned to previous status
Transferred to Selected Reserves
Transferred to Retired
Transferred to Inactive
Reduced from Military Service
Separated from Military Service

Pay Grade: 01
02
03
04
05
06
07
08
09
0A

Current Contact Information:
Phone: 123-456-7891
Cell: 987-654-3210
Email: johndoe@hotmail.com
Address: 123 Main St, Anytown, USA 98765

Point of Contact who can always reach you:
Name: John Doe
Phone: 321-456-7891
Email: john.doe@gmail.com
Mailing Address: 123 Any St, Anytown, USA 98765

Current Unit of Assignment:

Current Assignment Location:

DD FORM 2900, JAN 2008

PREVIOUS EDITION IS OBSOLETE.
This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number: ____________________________ Date (mm/dd/yyyy):

Health Care Provider Only

Provider Review and Interview

1. Review symptoms and deployment concerns identified on form:
   - Confirmed screening results as reported
   - Screening results modified, amended, clarified during interview

   a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead or of harming yourself in some way?
   - Yes   ○ No
   ○ Very few days ○ More than half of the time ○ Nearly every day
   b. Since return from your deployment, have you had thoughts or concerns that you might hurt or lose control with someone?
   - Yes ○ No ○ Unsure

3. If member reports positive or unsure response to 2a. or 2b., conduct risk assessment.
   a. Does member pose a current risk for harm to self or others?
   - No, not a current risk
   - Yes, poses a current risk
   ○ Immediate referral ○ Routine follow-up referral ○ Referral not indicated
   b. Outcome of assessment

4. Alcohol screening result:
   - No evidence of alcohol-related problems
   ○ Potential alcohol problem (positive response to either question 13a. or 13b. and/or AUDIT-C (questions 13c.-d.) score of 4 or more for men or 3 or more for women)
   ○ Yes ○ No
   Refer to PCM for evaluation

5. Traumatic Brain Injury (TBI) risk assessment
   - No evidence of risk based on responses to questions 9.a.-d.
   ○ Potential TBI with persistent symptoms, based on responses to question 9.d.
   Refer for additional evaluation
   ○ Yes ○ No

6. Record additional questions or concerns identified by patient during interview:

DD FORM 2900, JAN 2006
**PCL-M**

**INSTRUCTIONS:** Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repeated, disturbing memories, thoughts, or images of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Repeated, disturbing dreams of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Feeling very upset when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Avoiding activities or situations because they reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Trouble remembering important parts of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Loss of interest in activities that you used to enjoy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Feeling distant or cut off from other people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Feeling as if your future will somehow be cut short?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Trouble falling or staying asleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Feeling irritable or having angry outbursts?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Having difficulty concentrating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Being &quot;super-alert&quot; or watchful or on guard?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Feeling jumpy or easily startled?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

_PCL-M for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division_
This form must be completed electronically. Handwritten forms will not be accepted.

Health Care Provider Only

Provider Review and Interview

1. Review symptoms and deployment concerns identified on form:
   - ○ Confirmed screening results as reported
   - • Screening results modified, amended, clarified during interview.

   a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way?
      - • Yes
      - ○ No
      - ○ Unsure
      - ○ Very few days
      - ○ More than half of the time
      - ○ Nearly every day
   b. Since return from your deployment, have you had thoughts or concerns that you might hurt or lose control with someone?
      - • Yes
      - ○ No
      - ○ Unsure

3. If member reports positive or unsure response to 2a. or 2b., conduct risk assessment.
   a. Does member pose a current risk for harm to self or others?
      - • Yes, poses a current risk
      - ○ No, not a current risk
      - ○ Unsure
   b. Outcome of assessment
      - • Immediate referral
      - ○ Routine follow-up referral
      - ○ Referral not indicated

4. Alcohol screening result
   - • No evidence of alcohol-related problems.
   - ○ Potential alcohol problem (positive response to either question 13a. or 13b. and/or AUDIT-C (questions 13c.-e.) score of 4 or more for men or 3 or more for women).
      - ○ Yes
      - ○ No

5. Traumatic Brain Injury (TBI) risk assessment
   - • No evidence of risk based on responses to questions 9a. - d.
   - ○ Potential TBI with persistent symptoms, based on responses to question 9d.
      - ○ Yes
      - ○ No

6. Record additional questions or concerns identified by patient during interview:

DD FORM 2900, JAN 2008
**PCL-M**

**INSTRUCTIONS:** Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repeated, disturbing memories, thoughts, or images of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Repeated, disturbing dreams of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Feeling very upset when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Avoiding thinking about or talking about a stressful military experience or avoiding having feelings related to it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Avoiding activities or situations because they reminded you of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Trouble remembering important parts of a stressful military experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Loss of interest in activities that you used to enjoy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Feeling distant or cut off from other people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Feeling as if your future will somehow be cut short?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Trouble falling or staying asleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Feeling irritable or having angry outbursts?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Having difficulty concentrating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Being &quot;super-alert&quot; or watchful or on guard?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Feeling jumpy or easily startled?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

*PCL-M for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane  National Center for PTSD - Behavioral Science Division*
## Practice Forms Answer Key
Highlighted areas are reasons for excluding participation.

<table>
<thead>
<tr>
<th>Practice Form #</th>
<th>DD Form 2900</th>
<th>PCL-M</th>
<th>Include/Exclude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>S=score, R=reexperiencing symptoms, A=avoidance/numbing symptoms, H=hyperarousal symptoms</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Active Duty/ No risk for harm</td>
<td>S = 34</td>
<td>INCLUDE</td>
</tr>
<tr>
<td>2.</td>
<td>Active Duty/ No risk for harm</td>
<td>S = 51, R=5, A=7, H=5</td>
<td>EXCLUDE</td>
</tr>
<tr>
<td>3.</td>
<td>DD Form 2796 (PDHA and not PDHRA)</td>
<td>S= 40</td>
<td>EXCLUDE</td>
</tr>
<tr>
<td>4.</td>
<td>Active Duty/ No risk for harm</td>
<td>S=52, R=3, A=4, H=3</td>
<td>EXCLUDE</td>
</tr>
<tr>
<td>5.</td>
<td>Active Duty/ No risk for harm</td>
<td>S=51, R=3, A=4, H=4</td>
<td>EXCLUDE</td>
</tr>
<tr>
<td>6.</td>
<td>Active Duty/ No risk for harm</td>
<td>S=57, R=5, A=0, H=5</td>
<td>INCLUDE</td>
</tr>
<tr>
<td>7.</td>
<td>Reserve/ No risk for harm</td>
<td>S=40</td>
<td>EXCLUDE</td>
</tr>
<tr>
<td>8.</td>
<td>Active Duty/ Unsure risk for harm</td>
<td>S=34</td>
<td>EXCLUDE</td>
</tr>
<tr>
<td>9.</td>
<td>Active Duty/ Risk for harm</td>
<td>S=50</td>
<td>EXCLUDE</td>
</tr>
</tbody>
</table>
Script for Introducing the Study

We have completed the post-deployment health reassessment. The commanding officer of the Naval Hospital has given permission to LCDR Cunningham, who is a Duty Under Instruction (DUINS) doctoral student at the College of Nursing at the University of Florida, to conduct a research study here at the Deployment Health Center. LCDR Cunningham is conducting a research study related to post-deployment adjustment experiences. Study participation involves completing a written survey that is expected to take between 18 to 22 minutes of your time. Here is a description of the study (hand the participant the “Study Introduction Information Sheet” and data collection packet). Please read the Study Introduction Information Sheet. After the service member is finished reading, ask if they have any questions.

IF Service member answers **YES**, then answer their questions.

IF Service member answers **NO** or once all of their questions have been answered, then read the following:

I will now show you to a private location next door where you can make your decision to participate or not participate. If you decide to participate, please complete the study questionnaires and place them through a slot into a locked file cabinet that is located in the room where you will be located. The cabinet will be clearly marked. Your decision about participating in this study is anonymous. If you decide to participate, complete the survey and deposit it in the metal file cabinet and then leave. If you decide not to participate, leave your survey blank and deposit it in the metal file cabinet and then leave.
## Potential Participant Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do I have to participate in the study?</td>
<td>No, you do not have to participate in this study. This study is completely voluntary. If you decide not to participate, your decision will not affect the care you receive at the DHC.</td>
</tr>
<tr>
<td>What is the purpose of this study?</td>
<td>The purpose of this study is to obtain information about the needs of Navy personnel like you have after deployment.</td>
</tr>
<tr>
<td>How long will it take?</td>
<td>It will take approximately 18-22 minutes of your time to complete the questionnaires. Once you submit your surveys your involvement in the study will be finished.</td>
</tr>
<tr>
<td>What do I have to do to participate?</td>
<td>The procedure for this study involves reading and completing a post-deployment questionnaire and returning the completed questionnaire.</td>
</tr>
<tr>
<td>How many people will participate?</td>
<td>A total of 123 service members are expected to participate.</td>
</tr>
<tr>
<td>Are there any risks to me if I participate?</td>
<td>The risks and side effects related to participating in this study are expected to be minimal and felt to be no greater than that encountered in “normal” day-to-day life. Although the risk of emotional upset is considered to be no more than the risk of answering similar questions posed by family or friends, you may be at-risk for emotional upset as a result of reading and answering questions about your deployment or post-deployment experiences. You may feel free to decline to answer any questions. The only expected inconvenience will be the time needed to complete the questionnaires.</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>How will I benefit from participating in the study?</td>
<td>The research is not expected to help you personally but the results may help the investigator learn about resilience, social support, and post-deployment adjustment experiences. The information gained from your participation will be helpful in providing information that can be useful in aiding future service members with post-deployment adjustment.</td>
</tr>
<tr>
<td>Who do I contact if I believe that I have been injured from participating in this or any study?</td>
<td>If you believe you have been injured as a result of participating in this research study, you may call the legal office at 904-542-7816.</td>
</tr>
<tr>
<td>Can I decide not to participate once I begin completing the questionnaires?</td>
<td>Yes, you may withdraw from the study at any time. Your withdrawal will involve no loss of benefits to which you are entitled.</td>
</tr>
<tr>
<td>Will my command know that I participated or how I responded?</td>
<td>No, you have not been asked to sign this consent form in order to protect your identity. No personal identifying information will be collected, including no signature.</td>
</tr>
<tr>
<td>If I participate, will my responses be documented in my record?</td>
<td>No, no personal identifying information will be collected, including no signature. Therefore, your responses are completely anonymous.</td>
</tr>
</tbody>
</table>
PARTICIPANT STUDY INTRODUCTION INFORMATION SHEET

My name is Craig Cunningham. I am an active duty nursing student at the University of Florida. I am doing a research study on the thoughts, actions, and social support networks for Navy persons who have deployed.

I want you to share your thoughts, actions, and feelings about your experiences and your social support networks because you have deployed and returned within the past year and I need this information to complete a research project so that I may graduate with a PhD in nursing from the University of Florida. Your choice to take part in this study is voluntary. If you decide not to take part, no one will know. If you decide not to take part, simply place your blank survey in the box that will be pointed out to you and then leave. If you decide to take part in the study, please complete the survey and answer all of the questions. If any questions bother you, you may leave them blank. You will not be asked to provide your name. There will be no way to tie you with your answers. What you share will inform me about the issues and concerns that you face every day.

The purpose of this study is to gather the thoughts and feelings from Navy persons who have deployed. Taking part in this study involves reading and answering questions about your life. It should take no more than 18 - 22 minutes of your time. A total of 750 Navy persons will take part in this study.

The risks to you by taking part in this study are minimal and felt to be no greater than the risks in "normal" day-to-day life. If you become upset when you answer questions about your deployment, you may also become upset when you answer the study questions. If you do become upset and wish to speak to someone about it, simply return to the person who gave you this packet and tell them you want a referral to talk about your upset. You may also let one of the other staff members know you would like to talk to someone about a deployment issue.

The research will not likely help you personally. The results may help those doing the research learn about adjusting to life after a deployment. What you share may help future Navy persons adjust to life after deploying.

If you suffer any harm as a result of taking part in this study, treatment is available at the Jacksonville Naval Hospital and Branch Health Clinic. Any injury as a result of taking part will be assessed and treated in keeping with the care to which you are entitled under law. If you believe you have been injured as a result of taking part in this study, you may call the legal office at 904-542-7816. If you have any questions about your rights as a person while taking part in this study, you can contact the Clinical Investigation Department, at 757-953-5939 and/or the University of Florida Institutional Review Board at 352-273-9600.

Taking part in this study is voluntary. Your choice not to take part will involve no loss of care to which you are entitled under law. You are free to ask questions or to withdraw from the study at any time. If you choose to withdraw, you will not lose any care to which you are entitled. You have not been asked to sign a consent form in order to protect your identity. By choosing to complete the questions you are indicating your consent to take part in this study.
APPENDIX G
DATA SAFETY MONITORING STUDY RISK ASSESSMENT

Attachment #2
Data Safety Monitoring
Study Risk Assessment

Use this table to assess the risks of your study’s procedures, experimental treatments, and population vulnerability and to derive an estimate of the overall risk of your study. For each factor, enter the appropriate score and then sum the scores.

<table>
<thead>
<tr>
<th>Principal Investigator: Craig Cunningham</th>
<th>ENTER SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study title: The role of resilience and social support in predicting post-deployment adjustment in Navy personnel.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I. Experimental Treatment</th>
<th>ENTER SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Risk</td>
<td>No experimental treatment in study</td>
</tr>
<tr>
<td>Moderate Risk</td>
<td>Treatment effects documented from studies with similar and/or different populations and/or settings. No serious adverse events expected. Specific plans to monitor AEs detailed in DSMP</td>
</tr>
<tr>
<td>High Risk</td>
<td>Experimental treatment is being regulated by the FDA (e.g. investigational drug, device, or biologic)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Procedures, Measurements, and Data Collection Methods</th>
<th>ENTER SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Risk</td>
<td>Minimally invasive with low degree of emotional and/or physical discomfort. Probability of adverse events is low. Severity (magnitude) of adverse events is low. (Procedure may be rated low if probability of AE is moderate to high as long as the severity is low, as in the case of a bruise from phlebotomy) (e.g. procedures that meet IRB criteria for expedited review)</td>
</tr>
<tr>
<td>Moderate Risk</td>
<td>Moderate degree of emotional and/or physical discomfort. Probability of adverse events is low. Severity of adverse events is moderate to high. (e.g. PET scan, lumbar puncture, arterial lines)</td>
</tr>
<tr>
<td>High Risk</td>
<td>Moderate to high degree of emotional and/or physical discomfort. Probability of adverse events is moderate to high. Severity of adverse events is high. (e.g. heart muscle biopsy, insulin infusion)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Decision-making Capability</th>
<th>ENTER SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-vulnerable</td>
<td>Adult who 1) demonstrates decision-making capacity and 2) demonstrates no perception of undue influence or coercion to participate.</td>
</tr>
<tr>
<td>Vulnerable</td>
<td>Any minor. Adult who 1) demonstrates limitations in decision-making capacity and/or 2) is prone to perception of undue influence or coercion to participate.</td>
</tr>
</tbody>
</table>

The Level of Overall Risk of your Study is:

- **Low**: 3 or 4 points
- **Moderate**: 5 points
- **High**: 6 to 10 points

If the investigator feels that the score does not reflect the risk appropriately, he/she may provide a rationale justifying a different risk level in Part II, item 2 of the DSMP form.
APPENDIX H
ALTERNATIVE RECRUITMENT STRATEGY

Alternative Recruitment Strategy
If by the end of the first month of data collection, 34 participants have not completed the survey, the PI will consider recruiting the participants in person. Service members may respond more favorably to another service member’s request to participate. The private venue for service members to make the decision to participate or not participate will be maintained in order to ensure that service members understand that participating is voluntary. The PI realizes that this alternative strategy will not permit blinding of the researcher and complete anonymity. However, confidentiality can still be maintained especially since no identifying information will be included on any of the response forms. The details of the Alternative Recruitment Strategy are listed below.

Alternative Screening and Recruitment Procedures
Screening for inclusion in the study and recruitment will take place at the conclusion of the Navy mandated physical and psychological screening interview, which is recorded on DD FORM 2900 (PDHRA) and supplemented with the PCL-M form at the DHC. Responses on DD FORM 2900 and the PCL-M provide the interviewer with the majority of necessary information to make inclusion/exclusion decisions. The recruitment coordinator (PA) will view the form but not extract data to minimize the effort of the recruitment coordinator so as not to impact on their ability to complete their regular mission of identifying the physical and mental health needs of service members and referring them as necessary. The recruitment coordinator will use the Alternative Participant Inclusion/Exclusion Screening Flow Sheet (below) to guide decisions on which service members meet study inclusion/exclusion criteria and which service members to refer to the PI. All service members who meet screening criteria will be introduced to the PI (who will be stationed in a room next door) by the recruitment coordinator at the completion of the PDHRA. The PI will use the Alternative Script for Introducing the Study (below) to complete the screening and recruitment process.

Alternative Informed Consent Process
All service members who meet inclusion criteria will be provided with the participant information sheet (Appendix C) that contains a written description of the study including the study purpose, procedures, duration, risks, benefits, and the right to withdraw at any time without penalty. They will also be provided a list of deployment related resources (Appendix D), and a study packet that contains the study questionnaires (Appendix E). Service members’ questions or concerns about the study will be answered. Completing and returning the study questionnaires will serve as documentation of implied informed consent.

Alternative Data Collection Process
Once all questions and concerns are addressed, the PI will escort the service member to the data collection room, direct attention to the location of the file cabinet, and then leave. Participants can decide to complete the study packet or not complete the study packet and place either the completed or the non completed forms in the locked file cabinet.
The investigator will collect completed surveys from the file cabinet at the end of each data collection day. This process will continue until 123 participants who meet inclusion criteria have completed the survey.
Alternative Participant Inclusion/Exclusion Screening Flow Sheet

1. Completing PDHRA?
   - NO: Do NOT Refer to PI
   - YES
2. Active Duty Navy (DD FORM 2900, pg 1)?
   - NO: Do NOT Refer to PI
   - YES
3. Does service member pose a current risk for harm to self or others (DD FORM 2900, pg 4, #3a)?
   - NO
   - YES
   - Do NOT Refer to PI
4. Total PCL-M score ≥ 50?
   - NO
   - YES
5. At least 1 reexperiencing symptom on PCL-M at moderate level or above? (item #s 1-5)
   - NO
   - YES
6. At least 3 avoidant/numbing symptoms on PCL-M at moderate level or above? (item #s 6-12)
   - NO
   - YES
7. At least 2 hyperarousal symptoms on PCL-M at moderate level or above? (item #s 13-17)
   - NO
   - YES
   - Do NOT Refer to PI
8. REFER to PI

158
Alternative Script for Introducing the Study

If service member has met all inclusion/exclusion criteria contained on the DD FORM 2900 and the PCL-M, the recruitment coordinator will then introduce the service member to the PI:

The commanding officer of the Naval Hospital has given permission to me, LCDR Cunningham, to conduct a research study here at the Deployment Health Center. I am a Duty Under Instruction (DUINS) doctoral student at the College of Nursing at the University of Florida.
I am conducting a research study related to post-deployment adjustment experiences. Study participation involves completing a written survey that is expected to take between 18 to 22 minutes of your time. Here is a description of the study (hand the participant the “Study Introduction Information Sheet” and data collection packet). Please read the Study Introduction Information Sheet. After the service member is finished reading, ask if they have any questions.

**IF Service member answers YES, then answer their questions.**

**IF Service member answers NO or once all of their questions have been answered, then escort the service member to the data collection room and read the following:**

If you decide to participate, please complete the study questionnaires and place them through a slot into a locked file cabinet (direct service members attention to the file cabinet). Your decision about participating in this study is confidential. If you decide to participate, complete the survey and deposit it in the metal file cabinet and then leave. If you decide not to participate, leave your survey blank and deposit it in the metal file cabinet and then leave.
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Craig Andrew Cunningham was born in Omaha, Nebraska. One of five children, he grew up mostly in Ashland, Nebraska graduating from Ashland-Greenwood High School in 1986. He earned his B.A. in psychology and his B.S. in nursing from University of Nebraska in 1992 and 1995, respectively.

Upon graduating in 1995, Craig entered the active duty Navy as an Ensign. As a Navy Nurse for the past 16 years, and currently ranked a Commander, Craig’s past assignments took him to South Carolina, Virginia, and Florida working in a variety of roles as a Medical Surgical Nurse, Perioperative Nurse, and Director and instructor for the Navy’s Perioperative Nurse Training Program. While stationed in Virginia he was selected for Duty Under Instruction and attended Hampton University where he earned his M.S. in nursing administration and education in 2004. While stationed in Florida, Craig was again selected for Duty Under Instruction, his current assignment, which allowed him the opportunity to earn his PhD in nursing sciences at the University of Florida. Upon completion of his PhD program, Craig will be assigned to Naval Medical Center Portsmouth, VA.