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Understanding Veteran Reintegration Difficulties: The Predictive Value of Self-Concept Clarity,
Self-Expansion, and Identity Fusion

by

Samantha Tupy, M.A.

A dissertation

Submitted in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy in Clinical Psychology

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To the Graduate Faculty:

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Dear Ms. Tupy:

You are granted permission to continue your study as described effective immediately. The study is next subject to continuing review on or before April 23, 2019, unless closed before that date.

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Sincerely,

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Dedication

I dedicate this dissertation to my parents. Without you, I could not have had the opportunity to accomplish this dream. For that I thank you.

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TABLE OF CONTENTS

LIST OF FIGURES.....	x
LIST OF TABLES	xii
ABSTRACT	xv
CHAPTER	
I. INTRODUCTION & REVIEW OF LITERATURE.....	
Introduction.....	1
Reintegration	5
Military Culture	8
Deployment	9
Reintegration Difficulties	11
Self-Concept	14
Self-Concept Clarity	16
Self-Expansion	23
Identity Fusion	27
Current Study	32
Specific Aims and Hypotheses for the Study.....	36
II. METHODOLOGY.....	
Power Analyses	38
Participants	40
Measures	47
Procedures	61
Analyses	69
Summary of Data Screening Assumptions	69
Covariate Identification Analyses – Two Steps	72
Pilot Study and Full Launch Datasets Comparison Analyses	74
Hypotheses Testing Analyses	74
III. RESULTS	
Summary of Analyses to Combine Full Launch and Pilot Studies...	78
Identification of Covariates via ANOVAs (Step 1)	79
Identification of Covariates via Multiple Regressions (Step 2)	85
Summary of Hypotheses Testing	90
IV. DISCUSSION	
Hypotheses Findings	100
Study Implications	121
Strengths	129
Limitations	130
Future Directions	131
Conclusion	134

REFERENCES 136

APPENDICES 156

LIST OF FIGURES

Figure 1. Deployment for the Active Component	10
Figure 2. Inclusion of Other in the Self Scale	25
Figure 3. Visual Identity Fusion Scale	30
Figure 4. Visual Representation of the Plot Study	44
Figure 5. Visual Representation of the Full Launch	45
Figure 6. Visual of Combined Data Set	45
Figure 7. An Example of reCAPTCHA Checkpoint at the Beginning of the Study	68
Figure 8. Proposed Mediation Analysis for Hypotheses 4	77
Figure 9. Propose Mediation Analysis for Hypothesis 7	77
Figure 10. Visual Representation of the Mediation Analysis with Identity Fusion (Hypothesis 4)	95
Figure 11. Visual Representation of the Mediation Analysis with Self-Concept Clarity (Hypothesis 7)	99
Figure 12. Exploratory Visual Representation of the Mediation Analysis with Self- Concept Clarity without Covariates Included in the Model	186
Figure 13. Exploratory Visual Representation of the Mediation Analysis with Self- Concept Clarity with Covariates Included in the Model	188
Figure 14. Exploratory Visual Representation of the Mediation Analysis with Identity Fusion (Hypothesis 4) for Males	194
Figure 15. Exploratory Visual Representation of the Mediation Analysis with Identity Fusion (Hypothesis 4) for Females	196

Figure 16. Exploratory Visual Representation of the Mediation Analysis with Self- Concept Clarity (Hypothesis 7) for Males	199
Figure 17. Exploratory Visual Representation of the Mediation Analysis with Self- Concept Clarity (Hypothesis 7) for Females	200

LIST OF TABLES

Table 1. Grouping Descriptive of the Full Sample	46
Table 2. Continuous Descriptives of Full Sample	47
Table 3. Bootcamp Branch Timing	67
Table 4. Skew and Kurtosis of the Variables	72
Table 5. Means, Standard Deviations, <i>t</i> -test Results Combined Pilot Study and Full Launch Data	78
Table 6. Combined Total Study Variables Descriptives	78
Table 7. Recoding Information for Income, Race, Relationship Status, Branch, and Component	81
Table 8. Summary of the WIS-R Multiple Regression Analysis for Covariate Identification	87
Table 9. Summary of the SCC Multiple Regression Analysis for Covariate Identification	88
Table 10. Summary of the M2C-Q Multiple Regression Analysis for Covariate Identification	89
Table 11. Correlational Table for Continuous Variables Included in the Seven Hypotheses	89
Table 12. Sequential Multiple Regression Predicting M2C-Q from SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, Other Racial Group, and WSEQ	91

Table 13. Sequential Multiple Regression Predicting WIS-R from SDS-17, Length of Service, Length Since Military Separation, Legally Single, Marine, and WSEQ	92
Table 14. Sequential Multiple Regression Predicting M2CQ from SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, Other Racial Category, and WIS-R	93
Table 15. PROCESS Extension Predicting M2CQ from SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, Other Racial Category, Length of service, Length Since Military Separation, Marine Branch, Legally Single, WIS-R, and W-SEQ	95
Table 16. Sequential Multiple Regression Predicting SCC from SDS-17, length of service, length since military separation, income over 80k, and WSEQ	96
Table 17. Sequential Multiple Regression Predicting M2C-Q from SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, Other racial category, and SCC	97
Table 18. PROCESS extension predicting M2CQ from SDS-17, biological sex, DDRI-2, PCL-5, CESD-10, PDSS, Other racial category, length of service, Over 81k, SCC, and W-SEQ	99
Table 19. Sequential Multiple Regression Predicting M2C-Q from WSEQ, SDS-17, and PDSS	182
Table 20. Sequential Multiple Regression Predicting SCC from WIS-R, SDS-17, length of service, and Over 81k	183
Table 21. PROCESS extension predicting M2CQ from SCC and WIS-R	186
Table 22. PROCESS extension predicting M2CQ from SDS-17, Biological sex, DDRI-2, PCL-5, CESD-10, PDSS, Other racial category, length of service, Over 81k, SCC, and WIS-R	187

Table 23. Comparison of means among biological sex	189
Table 24. Multiple Regression Predicting M2C-Q from WSEQ for Males and Females	191
Table 25. Multiple Regression Predicting WIS-R from WSEQ for Males and Females	192
Table 26. Multiple Regression Predicting M2C-Q from WIS-R for Males and Females	193
Table 27. Multiple Regression Predicting SCC from WSEQ for Males and Females	197
Table 28. Multiple Regression Predicting M2C-Q from SCC for Males and Females	197

Understanding Veteran Reintegration Difficulties: The Predictive Value of Self-Concept Clarity, Self-Expansion, and Identity Fusion

Dissertation Abstract -- Idaho State University (2018)

In 2017 it was projected that approximately one million Veterans were reintegrating into civilian life. While most reintegrate with short-term issues, some continue to struggle with the process for years. It is estimated that half of Post-9/11 Veterans experience some reintegration difficulties, regardless of a physical injury or psychological diagnosis. The goal of the current study was to better understand reintegration difficulties beyond the mental and physical health conditions typically studied. Specifically, this was the first study to investigate previous military self-expansion (WSEQ; self-concept growth during past military service), current self-concept clarity (SCC; how clearly a person knows who they are and how stable that self is), and military identity fusion (WIS-R; a sense of deep-rooted oneness with military culture), in relation to reintegration difficulties. The sample included 534 Post-9/11 combat Veterans, ages ranging from 20 to 64, with 43.63% being female, who completed a series of questionnaires via an online platform, Mechanical Amazon Turk, that assessed the aforementioned variables and reintegration difficulties. These variables were assessed as well as more typically studied variables such as post-traumatic stress and depression symptoms, alcohol abuse, social support, and traumatic brain injuries. Results of the study showed that greater WIS-R (although very small effect), as well as greater SCC, were significant predictors of greater reintegration difficulties above and beyond the more typically studied variables. The current study, in conjunction with exploratory analyses, suggests that SCC and WIS-R are worthy of discussion and further investigation as Veterans reintegrate into civilian life. Additional future research will allow us to more fully understand WIS-R, SCC, and reintegration of Veterans and how to optimize reintegration

programs and treatment to promote the overall health of Veterans long-term if the effect, although small to medium here, are consistently supported.

Keywords: post-9/11 reintegration, Veteran reintegration, self-concept clarity, identity fusion, self-expansion, identity, self, military culture

CHAPTER I

INTRODUCTION AND REVIEW OF THE LITERATURE

Introduction

According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2014), there are approximately 23.4 million Veterans living in the United States, and 2.3 million Veterans from the more recent Post 9/11 period (Department of Veteran Affairs, 2011). Over 2017, it was projected that approximately one million Veterans will be reintegrating into civilian life (The White House, 2016). For many Veterans, reintegration is a relatively smooth process; however, it is expected that all Veterans go through a period of ambivalence while navigating back into the life they once knew (SAMHSA, 2012). While military to civilian reintegration is a multifaceted process, past research has focused heavily on reintegration of Veterans with a physical injury or a psychological diagnosis (Redmond et al., 2015). Although this specialized focus is needed, and offers rich information, many Veterans do not meet any diagnosis and yet struggle with the reintegration process (Sayer, Carlson, & Frazier, 2014). More explicitly, as stated by Sayer and colleagues (2014): “Even in the absence of or in addition to diagnosable disorders, many former combatants experience functional problems that impede their full reintegration into civilian life...” (p. 59). It remains unclear as to what is driving reintegration difficulties among these Veterans and the current study aims to identify additional variables worthy of attention.

While majority of Veterans may reintegrate with minor or short-term issues, some continue to struggle with the process of reintegration for years (Hinojosa & Hinojosa, 2011; Sayer et al., 2015). Furthermore, reintegration difficulties not only impact the Veteran, but those within their social network (Sayer et al., 2014). For example, Veterans may find it difficult to

engage outside of a military context with family and friends due to difficulties relating to and understanding one another (Demers, 2011). Civilian family and friends who were once close with the Veteran have reported feeling confused by the inability to communicate effectively with the Veteran and feeling as if the Veteran refuses to let others in emotionally (Sandoz, Moyer, & Armelie, 2015). The reverberations of a Veteran struggling with reintegration can touch many lives and the community as a whole. Thus, while military to civilian reintegration has received more attention over the last few years, there remains a prominent need for research in this area.

One burgeoning area of research focuses on the impact military culture may have on the reintegration process of Veterans. Previous literature has acknowledged that military culture promotes putting the group before the individual, selflessness, and loyalty to one another (Collins, 1998). Servicemembers' behaviors are supervised and require approval (e.g., told what to wear, where to be), are trained to remain stoic, and behavioral outcomes of the Servicemember reflect on the unit, leader, and military as a whole (Smith & True, 2014). Whereas, the United States culture promotes individualism (Collins, 1998), open emotional expression (Smith & True, 2014), and freedom to engage in voluntary behaviors (e.g., deciding when to come and go).

Another important aspect of military culture is the bond between Servicemembers, particularly those who have been deployed, as well as those who have engaged in combat together. Such bonds, as acknowledged by well-known American journalist Junger (2014) during a TEDx talk, may reflect a Servicemember's "strong sense of military identity." Junger spoke of the bond he observed between Servicemembers while covering a large portion of the war that took place in Afghanistan and is a well-known, and respected, author of several books focusing on Veteran reintegration difficulties. The bond developed between Servicemembers within the unit promotes adaptive functioning within a military context (e.g., deployment), as this promotes

military values required for completion of a mission (e.g., safety of others before self, trusting with lives, agreement that overall unit comes before self; Collins, 1998). Upon returning to civilian life, Veterans may experience a loss of camaraderie, a shift in expectations of civilian friendships due to the bonds developed in the military (e.g., unable to relate due to differing experiences) and Veterans may return with changed or differing values compared to civilian family and friends.

Collins (1998, p. 216) referred to these aforementioned cultural differences and tensions experienced by Veterans as the “civilian-military cultural gap,” and these discrepancies may add to reintegration difficulties. Further, Demers (2011) described the state of transition between the military and civilian culture as caught between two cultures. In addition to cultural differences noted above, previous work has often viewed military culture as a form of work identity (Redmond et al., 2015); however, this may not capture the whole picture. Recently, Lancaster and Hart (2015) conceptualized military culture as a combination of work and ethnic cultural identity. The rationale for conceptualizing military cultural identity in this way comes from the fact that those in the military “...speak in a language that sets them apart from others, are encouraged to put group needs in front of their own, have unique customs and values, share close-knit experiences that separate them from civilian populations, and consider “Veteran” to be a lifelong status (e.g., the motto “Once a Marine, always a Marine”; Lancaster & Hart, 2015, p.83). These characteristics of the military culture set it apart from being solely a work identity.

Even though there is a movement toward viewing military culture as similar to an ethnic cultural identity, there remain gaps in the current literature. Some researchers have focused on military culture as a whole (Kirke, 2010), while others have focused on the relationships between military and civilian cultures (e.g., sense of community; Demers, 2011). Both of these factors are

important for understanding the differences between military and civilian culture that may promote reintegration difficulties. Yet there appears to be a missing element, such as the unique identity of the individual undergoing the transition. This would include not only the content of the individual's self-concept (see section below), but the individual's understanding of who they are across contexts (e.g., self-concept clarity; Campbell, Trapnell, Heine, Katz, Lavalley, & Lehman, 1996). Self-concept clarity (see section below) has been studied in relation to intimate relationships (Lewandowski, Nardone, & Raines, 2010), self-esteem (Campbell et al., 1996), psychological disorders (Campbell, Assanand, & Di Paula, 2003), and more recently group membership (Slotter, Soto, & Winger, 2015; Winger, 2012).

The purpose of this paper is to first investigate if greater identity fusion and lower self-concept clarity are associated with greater reintegration difficulties. An overview of the literature on reintegration, military culture and deployment, self-concept, self-concept clarity, self-expansion, and identity fusion will be presented. Specifically, this review of the literature will include: a) the definition of reintegration for this study and identifying factors that have been associated with reintegration difficulties among Veterans; b) the definition and examination of military culture, c) definition and background of the deployment process, d) examination of specific and prominent factors associated with reintegration difficulties e) definition and background of self-concept and self-concept clarity; and f) definition and integrated discussion on self-expansion and identity fusion in relation to reintegration. Following the literature review, the justification for investigating these aforementioned variables will be provided in the rationale, purpose, and significance sections. Finally, the aims and hypotheses for the research project will be presented, along with the methods, results, discussion, and implications of the study.

Reintegration

The United States Department of Defense (DoD) has defined ‘reintegrate’ as “... the task of providing medical care and psychological decompression to allow the conduct of appropriate debriefings to ultimately return recovered personnel back to duty and their family” (DoD Joint Publication, 2012, p. 201). Prior to the DoD (2012) identifying a unified definition for reintegration regardless of military branch, Sayer and colleagues (2011) defined reintegration as “the post-deployment achievement of satisfactory levels of functioning at home, at work, in relationships, and in the community” (Sayer et al., 2011, p. 662). Because the subjective sense of reintegration as the Veteran is experiencing it is of interest for this proposed study, Sayer and colleagues’ (2011) definition is considered most appropriate for this research as it represents various domains of the subjective experience included in reintegration.

Leaving the military and beginning the process of reintegration is a unique process for each individual. While many may assume that reintegration into civilian life will be an exciting and welcoming experience, Yosick and colleagues (2012) noted that there are both expected and unexpected negative experiences that come with reintegration. An expected negative experience may be disrupted sleep patterns due to schedule and environmental changes. An unexpected negative experience may include finding it hard to reconnect with civilian friends (DoD, 2012). Thus, the military requires a reintegration program (Sayer et al., 2011) to assist with the initial reintegration period. Congress passed the Transition Assistance Program (TAP) in 2011 which requires soon-to-be Veterans to attend an online training within 180 days of separation and focuses largely on education and employment (United States Department of Labor, n.d.) The separation period is initiated with completion of the DD Form 2648 “Pre-Separation Counseling

Checklist,” which is legally required for all military Servicemembers to complete (United States Department of Labor, n.d.).

While engaging in the TAP is required, a military exit reintegration (i.e., pre-separation) program per branch varies beyond the offerings of TAP, and there is not a unified program as each branch (e.g., army) provides a program that best fits the particular branch members (Sayer et al., 2011). Overall, reintegration programs highlight areas that may be difficult for the military member, as well as tips to guide the process (Yosick et al., 2012). The programs have mandatory pre-separation counseling to identify areas that may be difficult for the Veteran (e.g., psychopathology) completed at least 90 days before separation. The Veteran is also provided with important information regarding medical insurance, life insurance, and benefits. The program also includes information on both common reactions to reintegration as well as “red flags” [i.e., symptoms of depression and post-traumatic stress disorder (PTSD), suicidal ideation, relationship problems] to watch out for, where to go for help (e.g., VA medical centers, US Department of VA), and common treatments (e.g., cognitive-behavioral therapy, exposure therapy) that are empirically supported (National Center for PTSD, 2014). While these programs tend to emphasize symptoms of psychopathology, it is also noted that there will be an adjustment period and adaption will take time. While these programs are beneficial and provide very good content, continued functional difficulties of Veterans suggest that current programs are sub-optimal. This may be related to a lack of focus on “soft skills” such as how to relate to others, interact with those who are not military trained, and how to learn to express oneself appropriately (e.g., demonstrating emotions appropriately and communicating them).

For most, a “honeymoon” phase may occur for a short-period after returning to civilian life, but this is often followed with the realization of the Veteran’s new reality (National Center

for PTSD, 2014). According to Demers (2011), many Veterans report a lack of understanding in how to return to the civilian role even after going through a reintegration program. Civilian culture promotes autonomy (Demers, 2011; Smith & True, 2014), self-guided structure (Cornish, Thys, Vogel, & Wade, 2014), and emotional expression (Smith & True, 2014). These values are in opposition to military culture (see military culture section below). Civilian friendships may feel altered due to Veterans' personal experiences in the military. Veterans may struggle with relating to those without these shared experiences (Hinojosa & Hinojosa, 2011) and military friendships may become distant or difficult to upkeep (Haller, Angkaw, Hendricks, & Norman, 2016). Military members who have enmeshed the military cultural identity into their personal identity may have more difficulty reintegrating into civilian culture (Naphan & Elliott, 2015). This is an important issue that warrants attention as many Veterans endorse struggling with reintegration.

Approximately 40% (Sayer, Noorbaloochi, Frazier, Carlson, Gravely, & Muroch, 2010) and up to 70% (Interian, Kline, Callahan, & Losonczy, 2012) of all Veterans have experienced a range of reintegration difficulties. More recently, it has been estimated that about half of Iraq and Afghanistan Veterans experience some level of reintegration difficulties, regardless of having a physical injury or psychological diagnosis (Sayer et al 2015). According to Sayer and colleagues (2010), approximately 40% of Iraq-Afghanistan combat Veterans reported difficulty with reintegration within the last 30 days, and 25% experienced significant difficulty in at least one area of reintegration (i.e., interpersonal relationships, productivity at work/school/home, community participation, self-care, leisure, and perceived meaning in life; Sayer, Noorbaloochi, Frazier, Carlson, Gravely, & Murdoch, 2010; Sayer et al., 2015). Bliese and colleagues (2005) reported a peak in reintegration difficulties within 90 to 120 days of return to a civilian

environment (Bliese, Wright, Adler, Hoge, & Prayner, 2005). Further, Milliken and colleagues (2007) noted that Veterans often report an increase in symptoms and reintegration difficulties during the initial 12 months of reintegration (Milliken, Auchterlonie, & Hoge, 2007).

Additionally, research has even suggested that the reintegration process may take years for some Veterans (Hinojosa & Hinojosa, 2011; Sayer et al., 2015). Thus, reintegration is not confined to a specific timeline.

Overall, reintegration involves a multitude of factors that include environmental, relationship, and behavioral repertoire changes, as well as possible physical and psychological symptom presentations. Current reintegration programs have made great strides in targeting these aforementioned factors, but currently lack information regarding how these factors may impact the Veteran's understanding of who they are. Discrepancies between the military and civilian cultures is an important factor to consider when conceptualizing reintegration difficulties.

Military Culture

Culture may be defined as the beliefs, traditions, rules, and ways of living that are adaptive for a particular environment (Matsumoto & Juang, 2013). It is through a cultural context that individuals perceive, interact with, and make sense of their world. While Servicemembers represent a diverse group of individuals, all share the experience of military culture (Demers, 2011). There are five branches of service that make up the United States Armed Forces: Army, Navy, Air Force, Marines, and Coast Guard. The Marines fall under the Department of the Navy, while the Coast Guard is under the Department of Homeland Security. Each branch has an active (full-time) and reserve category (part-time, unless called for duty; Halvorson, 2010). All military members join via voluntary enlistment, and currently the military is served by less than 1% of the United States population (Meyer, 2015).

Regardless of branch, all members complete a form of basic training (between six to 13 weeks) upon voluntary entry into the military (Halvorson, 2010). Training focuses on aspects of the culture (e.g., history, traditions, ethics), and skills needed for specific duties (Halvorson, 2010). Completion of basic training marks the initiation of becoming an active member of the military cultural group (i.e., an actual Servicemember of the force). The overarching values of honor and integrity are important to the military culture, with each branch or service having additional individualized values (Halvorson, 2010). For example, the Army core values are loyalty, duty, respect, selfless service, honor, integrity, and personal change. Whereas Navy core values are honor, courage, and commitment (Schading & Schading, 2007). In addition, loyalty, courage, obedience, and leadership are important characteristics for all members (Halvorson, 2010; Redmond et al., 2015). Military culture offers structured days and nights, hierarchy of command (i.e., lack of ambiguity), and discipline. Military members are expected to put the group, and mission, before him- or herself and integrate wholly within the culture (Redmond et al., 2015).

Deployment

Deployment is a unique component of the military culture that may be conceptualized in four broad phases: pre-deployment, deployment, post-deployment, and reintegration (DoD, 2012; see Figure 1 below). Pre-deployment may be viewed as “normal life” for the military member. This phase involves going about activities as usual, which includes training and medical assessments to ensure readiness for deployment. Before a deployment is initiated the unit will receive notification that mobilization for deployment may occur soon, and when the actual “mobilization alert” occurs, preparation for deployment begins. The pre-deployment phase ends and the deployment phase begins when a Servicemember or unit leave the installation (i.e.,

base/post; DoD, 2012) for theater (area that is, or may become, involved in war activities; DoD, 2012). The deployment phase involves all military duties applicable to that individual and unit. Post-deployment phase begins upon physical relocation from theater back to the installation. This phase is filled with preparing for the reintegration phase of the cycle and varies by branch of service. Lastly, the reintegration phase involves returning to the previous life before deployment (i.e., community, family, work duties). This phase may also require follow-up with medical personnel, counseling, and so forth, depending on both the branch and unit requirements (DoD, 2012). For the current study, the focus will be on the reintegration phase as this is when the transition between military and civilian cultures occurs. While there is also a transition period between civilian to military culture upon joining the military, basic training provides an extensive immersion into the military to aid the transition. There is not a similar extensive aid to transition from military to civilian culture upon exiting the military.

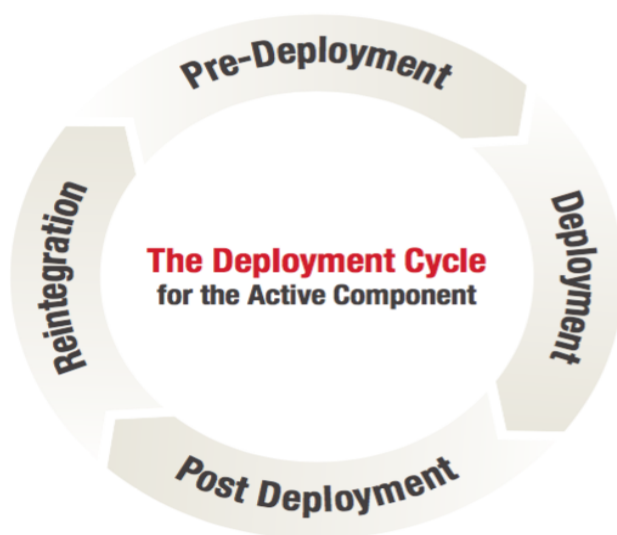


Figure 1. Deployment Cycle for Active Duty (DoD, 2012, p. 3)

Individuals who have been deployed (Smith & True, 2014), and in particular Veterans who were deployed to combat areas (Smith & True, 2014), are more likely to experience military

to civilian reintegration difficulties than their peers (Institute of Medicine (IOM), 2008; Sayer et al., 2015). While the reason for the associated difficulty is not fully understood, it may be that those who deploy are immersed more within the military culture during deployment and may develop a stronger bond to both the culture and with unit members to maintain safety and morale. Further, individuals who experience combat spend a significant amount of time with their peers and need to trust their unit with their lives. Junger (2014) noted that Veterans appear to struggle, in part, due to the bond with other Servicemembers developed while in combat zones, even if they may not enjoy the person as an individual. These strong bonds and stronger immersion into military culture may make the transition to no longer being with one's unit and part of active duty military more difficult for Veterans, although more research is needed to fully elucidate this possibility.

Known Factors Influencing Reintegration Difficulties

As described in the beginning of the Reintegration section above, reintegration is defined in this study as “the post-deployment achievement of satisfactory levels of functioning at home, at work, in relationships, and in the community” (Sayer et al., 2011, p. 662). As such, reintegration difficulties is defined here as the *lack* of satisfactory levels of functioning at home, at work, in relationships, and in the community. This section describes the common known factors associated with reintegration difficulties that were assessed to determine if they needed to be included as covariates for the current study for reintegration difficulties.

A review of the literature was conducted to identify the variables in past studies that were found to be most commonly associated with reintegration difficulties among Veterans. Established predictors for reintegration difficulties included PTSD (Sayer, Carlson, & Frazier, 2014), depressive symptoms (Sayer et al., 2010; Sherman, Borden, & Larsen, 2015), traumatic

brain injury (TBI; Baysinger, 2015; Sayer et al., 2015), and alcohol abuse (Baysinger, 2015; Coll et al., 2010; Sherman et al., 2015). Approximately 10 to 17% of treatment seeking combat Veterans screened positive for PTSD within the first year after deployment (National Center for PTSD, 2014; Sayer et al., 2014), approximately 5 to 15 % of Veterans screened positive for depression (RAND, 2008), and approximately 10 to 20% of Veterans seeking care have endured a TBI ranging from mild to severe, with the majority of those with a brain injury having a mild TBI (Sayer et al., 2014). Approximately 10% of Veterans screened positive for alcohol abuse after being transitioned to Veteran status (Sherman et al., 2015). Each of these common factors that contribute to increased reintegration difficulties are described below.

Psychopathology, such as PTSD and depression, increases a Veteran's difficulties of reintegration, even if additional reintegration stressors were not present (e.g., stressors related to locating jobs, reintegrating into the family unit; Sayer et al., 2014). According to a literature review by Baysinger (2015) Veterans with PTSD not only struggle with PTSD symptoms, but also struggle in relationships, have less social support, more difficulties with education and work (Baysinger, 2015). In addition, Veterans with PTSD tend to have increased avoidant coping styles that are maladaptive and overall lower quality of life (Baysinger, 2015).

Veterans struggling with depressive symptoms are also more likely to have difficulty sleeping (Plumb, Peachy, & Zelman, 2014), have difficulty in areas of cognitive functioning such as attention and memory (Sozda, Muir, Springer, Partovi, & Cole, 2014), and these Veterans tend to struggle with maintaining healthy relationships (Baysinger, 2015). Depressive symptomatology also negatively impacts functioning in areas of society such as educational and work-related endeavors (Baysinger, 2015; Hazle, Wilxoc, & Hassan, 2012).

Among the Post-9/11 Veterans TBIs have become common of this war period that they are known as a signature wound of the Post-9/11 war era (Bahraini & Brenner, 2014). Moderate to severe TBIs are known to increase reintegration difficulties due to potential cognitive and affective changes that may occur, such as low mood, anxiety, impulsivity, attention and concentration difficulties, as well as difficulties with inhibition to name a few (Bowling & Sherman, 2008).

Alcohol abuse is of the most common substance abuse among Post-9/11 Veterans (Coll et al., 2010; Sherman, Borden, & Larsen, 2015). Often the abuse of alcohol is related to ease of access and the self-medicating properties alcohol may hold for Veterans struggling with reintegration. As such, alcohol abuse often co-occurs with other psychopathology such as PTSD or depression (Baysinger, 2015; Lewis, Lamson, & Leseur, 2012). Veterans who have been deployed to combat zones are at an increased risk for alcohol abuse (Blow et al., 2013).

Inadequate post-deployment social support (perceived) has also consistently been associated with more difficulty with reintegration (Baysinger, 2015; Larson & Norman, 2014), with 29% of those utilizing the VA reporting concerns in this domain. Post-9/11 Veterans who were in combat, but had few if any PTSD symptoms, had endorsed having adequate social support for their needs and good support from family and friends (Pietrzak & Southwick, 2011). Having high levels of support has consistently shown to be correlated with less PTSD and depressive symptoms over time (Demers, 2011; 2013). However, Knobloch and colleagues (2013) noted that Veterans who have adequate social support, but inadequate reintegration training (or lacked training) still struggled (Knobloch, Ebata, McGlaughlin, & Ogolsky, 2013).

Finally, having experienced more combat exposure has been associated with greater reintegration difficulties (Larson & Norman, 2014). “More combat exposure” was defined as a

greater number of combat-related potentially traumatic experiences (e.g., times shot at; Larson & Norman, 2014). Of course, combat exposure in and of itself is also correlated with the development of psychopathology; however, even those who do not meet full criteria for a mental health disorder have reintegration difficulties (Sayer et al., 2015). This may occur for various reasons, but combat exposure has various undesirable impacts on the Servicemembers' physiology. Common occurrences are increased hypervigilance, decreased appetite and ability to sleep, gastrointestinal issues (e.g., diarrhea), and emotional numbing (Grossman & Christensen, 2007). These difficulties may return from deployment with the Veterans and even remain upon discharge from the military to Veteran status. Additionally, the very distance between the Servicemember and the combatants, can increase the experience of the aforementioned combat stress (Grossman & Christensen, 2007).

The review of the literature focusing on variables associated with reintegration difficulties reveals an intricate web of factors that may act as barriers alone, or in combination, to the process of reintegration (e.g., PTSD, combat experience, depression, alcohol abuse, low social support, TBI). While the review is not meant to be exhaustive of the factors that exist, the major contributors were presented. Next, I will review factors that are important to examine about Veterans' understanding of who they are and how relates to military cultural identity, as I propose that these variables are important for better understanding reintegration difficulties and their investigation will fill gaps in the literature.

Self-concept

Self-concept may be defined as the information that an individual hold to be true of him- or herself (e.g., physical characteristics, attitudes, beliefs, relationships, roles; Emery, Walsh, & Slotter, 2015). While self-concept is relatively stable (Campbell et al., 1996), it is flexible to

accommodate one's life experiences (Emery, Walsh, & Slotter, 2015). Self-concept is hypothesized to be organized in a fashion that allows more meaningful information (e.g., those relevant to one's current situation, goals, ideals etc.) to be easily accessible compared to those less utilized or less important to the individual (Epstein, 1973; McConnell, 2011). Self-concept is constructed through the rich network of experiences throughout the individual's history. In particular, experiences that are important to the individual will likely contribute to self-concept (McConnell 2011). Experiences may include learning new skills, development of dyadic relationships (e.g., friendships, romantic relationships), social role changes (Emery, Walsh, & Slotter, 2015), or becoming a member of social groups (Coats, Smith, Claypool, & Banner, 2000; Slotter et al., 2015). Further, individuals will most likely seek out experiences and behave in ways that are consistent with their self-concept (Setterlund & Niedenthal, 1993). For example, a person who values honesty will be less likely to lie or steal even when presented with the opportunity.

An individual's self-concept is subject to change depending on various life experiences. For instance, with novel experiences the self-concept may expand (e.g., a person starting a first job in education would begin to think of themselves as employed and a teacher), and similarly when relationships (Lewandowski, Aron, Bassis, & Kunak, 2006) or group membership (including role changes) ends (McIntyre, Mattingly, Lewandowski, & Simpson, 2014), there may be modifications to the self-concept (e.g., a person who has gotten divorced would no longer think of themselves as married, as the partner of their ex, or as someone who engages in a spousal role). Previous research has found that the more important a relationship (Lewandowski, Aron, Bassis, & Kunak, 2006) or social group (Winger, 2012) is, the more likely the self-concept will be reduced from the loss of the relationship. This also occurs when individuals experience a

role exit from a position (e.g., becoming unemployed) that was important to the self-concept (McIntyre et al., 2014). Furthermore, when the self-concept constricts, individuals also experience a reduction in self-concept clarity (Slotter, Gardner, & Finkel, 2010; McIntyre et al., 2014). Veterans who have integrated the military cultural group within their personal identity may experience more constriction of the self-concept and feel uncertain of who they are as a result. When a situation occurs in which there is a reduction in the self-concept and self-concept clarity, individuals often demonstrate varying degrees of distress (e.g., increase of negative affect; Lewandowski et al., 2006).

Self-concept clarity is the focus of the current study, rather than the self-concept (rationale is discussed in detail in self-concept clarity section below). Previous research findings suggest it is one's understanding of who they are and the lack of stability in that understanding (i.e., self-concept clarity) that may impede reintegration (Demers, 2011; Lancaster & Hart, 2015). A study by Demers (2011) highlights this point through quotes from Veterans: "I felt really confused and out of place when I got back," and "You go home and you don't know how much you've changed until you start to get around family and friends ... with them, I realized I'm not how I used to be" (p.171).

Self-Concept Clarity

Self-concept clarity refers to the coherence of one's self-concept (Campbell, 1990; Campbell & Lavalley, 1993), and is distinct from the construct of self-concept (i.e., information held within the self-concept; Campbell et al., 1996). More explicitly, self-concept clarity is how clearly a person knows who they are and how stable that self is, rather than the make-up of the self-concept itself. That is, if a person was asked the question "Who are you?" the self-concept would be the content of their response (e.g., I am an Idahoan, I am a competitive pole-vaulter, I

am an excellent gardener etc.) while self-concept clarity would be reflected in the way in which they respond (e.g., do they have a lot of trouble generating responses? Do they give responses in a confident manner or do they take a long time and oscillate back and forth between responses – “I’m a cook, well, not really, I mean maybe I like to cook but maybe I’m not good enough at it to really call myself a cook...”). Self-concept clarity is also the way in which the self-concept is organized into various identities, as well as the strength of each identity (Campbell et al., 1996; Campbell 1990; Campbell et al., 2003). Particular identities will hold greater significance for an individual and will subsequently guide the individual’s behaviors and influence sought out future experiences (Guerrettaz & Arkin, 2016). For example, if an individual believes they are a good student (example of a self-concept), they will likely engage in behaviors consistent with that identity, such as studying and seeking guidance to understand concepts as needed. If the same student experiences financial difficulties which makes them worry about having to drop out of school, they may begin to feel less confident and sure about holding onto their good student identity (lower self-concept clarity) even if currently that self-concept is intact. That is, while they may currently be getting good grades and otherwise being a good student, their uncertainty about their academic future may make them unsure of their identity as a student and whether they will be able to continue to see themselves as a good student. A Servicemember who has integrated the military cultural identity within the self (self-concept, e.g., “I am a soldier”) will also engage in behaviors consistent with this identity. This may be behaviors such as appropriately using the hierarchy of command, remaining vigilant for threats in the environment, and waiting to act until ordered to do so. Upon returning to the civilian culture, the Veteran’s environment (civilian environment) may no longer support the behaviors consistent with the self-concept (like the previous example) and the Veteran’s self-concept will need to shift (e.g., from

“I am a soldier” to “I am a Veteran”). Depending on the individual, this shift may be quite difficult. That is, the Veteran may begin to question their previously held civilian identity, military identity, and current Veteran identity, and may thus experience lower self-concept clarity (e.g., it difficult to transition to the new “I am a Veteran” self-concept if one is not sure what that means, and/or if one is uncomfortable with this new self-concept for any reason including not wanting to let go of one’s pass soldier self-concept).

According to Aron and Aron (1996), individuals are motivated to develop a stable and unambiguous self-concept (Aron & Aron, 1996; Besta, Mattingly, & Blazek, 2016), that is, a self-concept that is clear and does not change frequently. This motivation to develop a stable and unambiguous self-concept is adaptive as it is more difficult to understand the self and present a coherent self to others if one’s self-concept is vague, contradictory, and/or constantly in flux. Self-concept clarity has been shown to be associated with positive outcomes such as better psychological adjustment (Lewandowski et al., 2010). In addition, high self-concept clarity is often associated with high self-esteem (Campbell et al, 1996), lower psychological stress levels (Ritchie, Sedikides, Wildschut, Arndt, Gidron, 2010; Smith, Zhan, Huntington, & Wethington, 1992), and lower anxiety and depression (Bilger, Neimeyer, & Brown, 2001). According to Smith and colleagues (1992) maintaining a clear self-concept tends to be associated with the use of more adaptive coping mechanisms that bolsters an individual’s ability to navigate their environment (Smith et al., 1992), allowing the individual to manage both daily and large stressors (Guerrettaz & Arkin, 2016). Based on these findings Veterans with higher self-concept clarity in the civilian context would likely adapt well to the demands of reintegration, whereas those with lower self-concept clarity may be prone to experiencing more reintegration difficulties.

Those with high self-concept clarity also tend to engage in behaviors that are aligned with their self-concept (e.g., beliefs) compared to those who may feel confused about their sense of self (Guerrettaz & Arkin, 2016). For instance, an individual may engage in a behavior that is not characteristic of their self when feeling uncertain of who they really are (e.g., lying when normally viewing the self as an honest person). Individuals with high self-concept clarity will also be more confident in forecasting behaviors that they will likely engage in (e.g., behaviors consistent with goals; Lewandowski & Nardone, 2012; Smith et al., 1992). Smith and colleagues (1992) highlight that those with high self-concept clarity appear to experience as many stressors as those with low self-concept clarity, but their interpretations and responses to the stressors are more adaptive (Smith et al., 1992). Veterans with high or low self-concept clarity will likely be exposed, in general, to similar stressors during the reintegration period, but how they handle these stressors may differ based on their self-concept clarity and in turn influence how much difficulty they experience with reintegration. It is thus important to identify if Veterans do indeed experience a weakening of self-concept clarity as a result of leaving the military (particularly for those who have strongly integrated the military group identity within themselves) and if lower self-concept clarity is indeed associated with experiencing greater reintegration difficulties. This knowledge would not only help us better understand these variables and their relationships but could also inform reintegration programs to better prepare Veterans for the transition and to identify those Veterans who may be especially at high risk for reintegration difficulties for more intensive intervention and/or follow-ups.

Self-concept clarity, like the overlapping construct self-concept, changes with both the development and loss of relationships, memberships, or environments that maintained the individual's self-concept clarity (Guerrettaz & Arkin, 2016; Slotter et al., 2015). While this may

occur via a variety of relationships, as humans are social beings, it may also occur through an expanded behavioral repertoire (e.g., environment that requires types of skills). According to Light and Visser (2013) leaving a particular role (e.g., relationship, membership) may reduce clarity of the self-concept more compared to beginning a new role (Light & Visser, 2013). This may be due to the constriction of the self-concept that often occurs with the loss of important roles, relationships, or memberships.

An individual will often experience more self-concept constriction at dissolution of a role, relationship, membership, or environment (Slotter & Gardner, 2014) if they had initially significantly augmented the self-concept (Lewandowski et al., 2006), or were heavily influenced to add characteristics to the self-concept (Slotter & Gardner, 2014) via the role, relationship, membership, or environment. That is, when a role, relationship, membership, or environment offers many opportunities for self-concept growth (e.g., when an individual is in challenging and novel situations, growth is often necessary to efficiently function in that setting), the self-concept may grow to include many aspects surrounding that role, relationship, membership, or environment. Subsequently, the loss of that role, relationship, membership, or environment may lead to notable constriction of the self-concept and lower self-concept clarity. Even when individuals simply imagine the loss of a relationship (Slotter & Gardner, 2014) or membership (Winger, 2012) that provides opportunity for challenge, novelty, and growth, they reported lower self-concept clarity as a result. Slotter, Soto, and Winger (2015) suggest that reduced self-concept clarity may also result from a change in behavioral routines (e.g., structured military schedule to civilian flexibility). In addition, individuals who recalled experiencing a significant addition to their self-concept as the result of developing a new relationship reported lower self-concept clarity at the end of that relationship compared to those who recalled experiencing less

self-concept change at onset (Slotter et al., 2010). That is, if a new relationship provides significant self-concept growth, the loss of the relationship is particularly detrimental to self-concept clarity (whereas a relationship that does not offer much opportunity for growth would not affect self-concept and self-concept clarity as significantly). This relates to the current study as exiting the military is a dissolution of a role, membership (as an active duty military member), multiple relationships (e.g., with other military members, one's unit), and a loss of an environment with a familiar culture and set of rules, and thus these changes could reduce self-concept clarity as the individual transitions to Veteran status. The military culture promotes integration of the military group identity that begins at basic training and continues throughout service. Those who more strongly enmesh the military cultural identity within the self (and include more of their military identity into their self-concept) may experience lower self-concept clarity upon leaving the military.

Slotter and colleagues (2010) reported that individuals who felt more committed to a particular relationship more frequently reported confusion about who they were after the loss of that relationship. Servicemembers who are more committed to the military may also feel more confused about who they are after leaving the military and rejoining civilian society. The confusion suggests low self-concept clarity in that the individual no longer endorses holding a well-defined and clear sense of self. Slotter and colleagues (2010, 2014) suggest that this reduction of the self-concept may be a healthy way of dealing with the loss of a relationship or environmental changes, and perhaps those who maintain the expanded self-concept may experience low self-concept clarity as a result (Slotter et al., 2010; Slotter & Gardner, 2014). Said another way, Veterans who maintain a strong military group identity (i.e., referred to as identity fusion in the current study, see Identity Fusion section below) and a military self-concept

(despite this no longer being accurate or relevant) may be more likely to experience lower self-concept clarity upon returning to civilian culture as they struggle with accepting the loss of a role and adopting to a new self-concept. While reduced self-concept clarity is associated with heightened distress (Slotter et al., 2010), it is possible that reduced clarity may be needed to allow for modification of the self-concept content to regain clarity in the new context (Slotter et al., 2010). Thus, it could be that all Veterans experience some level of reduced clarity as they transition self-concepts, but those who experience especially low clarity and/or low clarity for a longer period would experience the most reintegration difficulties.

A review of the literature identified variables most commonly associated with (either higher or lower) self-concept clarity. Self-concept clarity has been thought to be a relatively stable, trait-like, construct across the lifespan (Campbell et al., 1996). However, there is evidence that self-concept clarity may, in general, present as a linear relationship with age. For example, some have found that self-concept clarity is positively associated with age (i.e., older ages associated with greater clarity; Diehl & Hay, 2011; Light & Visser, 2013; Lodi-Smith & Roberts, 2010). Additionally, another variable that has often been associated with self-concept clarity is biological sex. Two studies noted a significant difference between males and females in regard to clarity of the self-concept. Specifically, Nardone (2012) identified a significant difference between males and females ($t = 2.83, p < .05$, Cohen's $d = 0.28$), and Campbell and colleagues (1996) reported biological sex differences ($F(1, 448) = 5.87, p < .02$, small effect size), with both studies reporting females reporting lower self-concept clarity than males.

Overall, self-concept clarity is an important variable to be considered when investigating military to civilian reintegration due to the implications lower self-concept clarity can have on psychological and functional outcomes. Throughout service, Servicemembers are experiencing

novel and challenging experiences, developing relationships with fellow Servicemembers, taking on new roles, getting used to new environments and a new membership, and adding to their self-concept. This is particularly true for Servicemembers who have experienced a deployment, as they will spend a significant amount of time with unit members in challenging situations and may quickly form strong bonds as they work together. Through these experiences Servicemembers integrate the military culture within the self and experience additions to their self-concept, this process of growth is referred to as self-expansion.

Self-Expansion

According to the self-expansion model (Aron & Aron, 1986), individuals are motivated to expand their self-concept through relationships with others and through novel, exciting, and challenging/interesting experiences (Aron, Aron, Heyman, Norman, & McKenna, 2000). Self-expansion is a dynamic process in which the self-concept grows, and occurs via an “...accumulation of knowledge, experience, identities, and other resources ...” (Lewandowski et al., 2006, p. 318). In addition, Lewandowski and Aron (2004) noted that novel and challenging situations were important contributors to expansion as these provide opportunities to gain knowledge, learn new skills, and otherwise add positive attributes to the self-concept (Lewandowski & Aron, 2004). The self-expansion model originated in the close-relationships literature as romantic relationships (particularly in the early stages when novelty and excitement are high) are often a source of self-expansion. Relatedly, relationship dissolution is often associated with contraction (rather than expansion) of the self-concept, with the effect being especially notable in those whose relationships provided them with higher levels of expansion (Lewandowski et al., 2006). While romantic relationships are often a source of self-expansion, this is not always the case, and research finds that those in relationships which do not provide

ample self-expansion are more susceptible to infidelity (potentially a way through which alternative self-expansion is acquired; Lewandowski & Ackerman, 2006). Additionally, while relationship dissolution is often associated with self-contraction, this is not always the case, as those who end a relationship that was low in self-expansion can exhibit self-concept growth following the breakup (Lewandowski & Bizzoco, 2007).

As individuals self-expand in response to the development of relationships and experiences, an overlap of characteristics often develops (Agnew & Etcheverry, 2006; Agnew, Van Lange, Rusbult, & Langston, 1998). An independent, yet complementary, component of the self-expansion model (in addition to the motivation to expand the self-concept) that is associated with the development of relationships is inclusion of other in the self (Aron et al., 2004). Inclusion of other in the self occurs when an individual incorporates other's characteristics, values, and beliefs into their own self-concept (Aron, Aron, & Smollan, 1992). This intertwining often results in blending of characteristics between two people (e.g., a romantic relationship). As an individual self-expands, inclusion of other in the self supports the expansion of the self-concept. Aron and colleagues (1992) developed the Inclusion of Other Scale (IOS) to assess the level of inclusion of other in the self (Aron et al., 1992). Figure 2 provides an illustration of the IOS scale and offers a visual of the overlap that occurs as an individual's self-concept expands to include another's characteristics. Participants are asked to indicate the pair of circles that best describes their relationship. Note that as the choices move from no inclusion of other in the self (the first pair of circles, which have no overlap) to very high levels of inclusion of other in the self (the last pair of circles), the circles also increase in size as more overlap occurs, highlighting growth of the self. Self-expansion and inclusion of other in the self is not limited to one-on-one relationships, but can also occur with social groups (Coats et al., 2000).

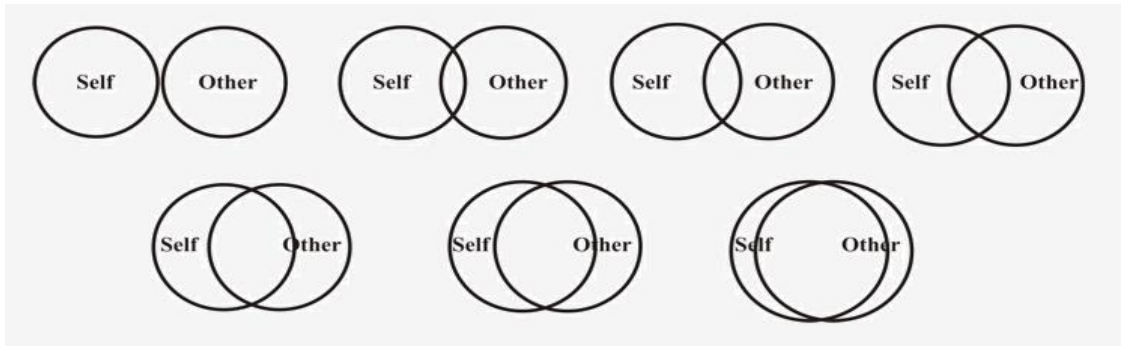


Figure 2. Inclusion of Other in the Self Scale (Aron et al.,1992).

Incorporating social groups within the self-concept allows for individuals to achieve a sense of confidence in one's ability to successfully accomplish goals (Aron, Aron, & Norman, 2001). According to Hogg (2000, p. 478) "uncertainty about one's attitudes, beliefs, feelings, and perceptions, as well as about oneself and other people, is aversive ... because it is ultimately associated with reduced control over one's life." Further, individuals seek to feel safe and connected with others (Brewer, 2001). As individuals intertwine others within themselves and maintain the novel developments to the self-concept, individuals should have a solid sense of who they are (Besta et al., 2016). As mentioned earlier, an individual will often experience self-concept constriction at the dissolution of a relationship, role, or group membership (Lewandowski et al., 2006; Slotter & Gardner, 2014). This is particularly true if that relationship or social context was highly self-expanding (Lewandowski et al., 2006; McIntyre et al., 2014 Simpson).

McIntyre and colleagues (2014) found evidence in two studies that self-expansion can occur in relation to an individual's workplace, and also developed and utilized measurements of current and previous job self-expansion. In addition, their studies showed that individuals endorsing greater self-expansion for a past job exhibited lower self-concept clarity compared to those who did not feel that their past job was particularly self-expanding.

The first study assessed the relationship between self-expansion of current employment with job satisfaction ($r = 0.74, p < 0.001$) and job commitment ($r = 0.70, p < 0.001$) in 84 civilian subjects. The subjects had a range of tenure with the current place of employment (e.g., from less than one year to over 10 years). This study provided evidence that employment self-expansion is associated with better employment outcomes. McIntyre and colleagues' (2014) second study assessed the relationship between previous work self-expansion of past employment with current self-concept clarity in civilians, hypothesizing that "... losing a highly self-expanding job would result in reduced self-concept clarity compared to those losing a nonexpanding job" (p.62).

The second study included 73 subjects from MTurk who were, at the time, unemployed due to various reasons. For example, 28% quit the previous job, 37% had lost the previous job, and 34% were unemployed for another reason. Indeed, those who had previously held a highly expanding job endorsed weaker current self-concept clarity ($B = -0.25, p = 0.03$) than those who had previously held jobs that were not highly expanding. In summary, McIntyre et al. (2014) found that jobs can be a source of self-expansion and (similar to results from close-relationship self-expansion research) workplace self-expansion predicts job satisfaction and commitment (study 1), while the loss of a self-expanding job is associated with negative outcomes such as lower self-concept clarity (study 2).

When thinking about self-expansion/self-concept growth and self-concept clarity in relation to how individuals integrate into groups (rather than one-on-one relationships), it is important to understand group identity and identity fusion.

Identity Fusion Theory

Identity fusion is a sense of deep-rooted oneness with a particular group (Fredman et al., 2015), and is common among family members (i.e., a social group; Swann, Seyle, Gomez, Morales, & Huici, 2009). However, an individual's sense of personal identity is not lost within this framework. From the identity fusion theory view, individuals develop and maintain both a personal identity and a group identity. The group identity does not 'trump' the personal identity; rather, the two are considered complimentary and fluid with one another (Besta et al., 2016). More specifically, the individual does not sacrifice their identity to take on a group identity (Swann et al., 2009), rather identity fusion occurs when the identities "merge to create a synergistic self" (Besta et al, 2016, p. 58), e.g., "I am an individual separate from my family but my family is important to me, I feel a strong connection with them, and my identity is linked to being part of my family unit." In the current study, the terms "military identity" and "military group identity" are used to refer to identity fusion in relation to the military and military culture.

Through the synergistic process of identity fusion, a group member holds both personal relationships with other group members (Besta et al., 2016), and a relationship with the group as a whole (Brewer & Gardner, 1996). An individual may incorporate the group into him- or herself (extended fusion; Swann, Jetten, Gomez, Whitehouse, & Bastian, 2012) and may also develop a more personal-level relationship with some of the group members (e.g., unit members; local fusion; Swann et al., 2012). Like self-expansion, identity fusion involves including others in the self, but also goes beyond relationships with others to include group-level characteristics (e.g., both the individual-level relationship such as friendship and brother/sisterhood, as well as group-level such as military identity including things such as values, traditions, and rules of the group; Besta et al., 2016), as well as enmeshing the self within the group, more so than conceptualized

by the inclusion of others in the self (Swann et al., 2009). Fusion of a group identity within the self would allow for the development of a strong group identity and higher self-concept clarity, serving as an adaptive process that would promote positive outcomes previously mentioned (e.g., positive affect) while the individual is in the military.

According to Swann and colleagues (2012), individuals who are fused will report feeling they are an important part of the group and that the group is important to them (i.e., the group strengthens one another). Further, according to Swann and colleagues (2014b) individuals tend to develop a deep, unwavering bond with the larger group in question and this bond can exist for strangers with the same group membership (e.g., someone else in your branch of the military, even if you've had no personal interaction with them; Swann et al., 2014b). Fused individuals' personal and group identities both equally influence the content of the self-concept (Swann, Hixon, Gomez, Huici, & Morales, 2010). This is consistent with the idea that identity fusion allows for the group identity and the personal identity to be intertwined and fluid; in other words, the identities influence one another. For example, a study by Swann and colleagues (2009) noted that when a fused individual's personal identity was challenged, this activated their willingness to die for their fused group even when the group was not challenged (Swann et al., 2009). A fused individual will hold a strong, family-like tie to the group (Besta et al., 2016; Swann et al., 2012) and will likely develop close relationships with some of the group members (Besta et al., 2016).

Individuals who are fused with a group will engage in pro-group behaviors to save a member of the group or the group as a whole. These individuals report strong beliefs that other group members would do the same for them (Swann et al., 2010; Swann et al., 2014a; Swann et al., 2014b). Fusion may occur through various mechanisms such as one highly emotional

experience or repeated experiences (Swann et al., 2010). According to Swann and colleagues (2010), individuals who were fused with a group tended to engage in pro-group behaviors, and particularly so when physiological arousal was induced (Swann et al., 2010). Notably, fusion tends to occur in instances in which the group membership appears to be relatively permanent (Fredman et al., 2015). Thus, it is nearly unimaginable for fused members to consider life without the group membership.

Swann and colleagues (2012) outlined four major principles of the identity fusion theory. The first is the agentic-personal-self principle, which holds that motivation of behaviors stem from both the personal and group identity the individual holds (i.e., pro-group behaviors). This supports the synergistic relationship between the personal and group identities. Secondly, the identity synergy principle states that this combination of personal-group motivational drive will result in salient and consistent behaviors. Swann and colleagues stated, "...people have a deep need for social relations that are coherent, predictable, and devoid of conflict and misunderstanding (Swann et al., 2012, p.6). Regardless if a personal identity is challenged or a group identity is challenged among fused individuals, the behavioral outcomes are similar (Swann et al., 2012). If someone is putting down a family name, family member, or the self, fused individuals would engage in behaviors that defend the family overall, as the challenge would engage both the personal and group identity. The same may be said for military group and personal identity for fused Servicemembers. Further, regardless of the situation (i.e., whether the personal or group identity is triggered as the driving force for behavior), the individual will respond in a similar fashion.

The third principle, relational ties, assumes that other group members of a particular group hold similar personal and group identities. Thus, "other ingroup members will not only be

valued by virtue of their representativeness of the group (prototypicality for the group), they will also be valued for their unique personal characteristics that make them attractive relationship partners (p. 3).” That is, fellow military members may be valued for their individual characteristics which adds positively to the experience of working/bonding with them (e.g., a particular skill, a good person) as well as for their representativeness of a general military group identity (e.g., military members are skilled and honorable). The fourth and final principle is the irrevocability principle. The irrevocability principle states that fused individuals often remain committed to the particular group, even if the context changes and the environment no longer supports the strong allegiance (Swann et al., 2012, e.g., “Once a Marine, always a Marine”).

The Aron, Aron, and Smollan (1992) IOS scale was modified to represent the inclusion of a social group (Schubert & Otten, 2002) within the self, according to the identity fusion theory (Swann et al., 2009; see Figure 3 below). The modified IOS scale is presented here simply to provide an illustration of fusion between a group and the self (visual representation of identity fusion in item E below in Figure 3).

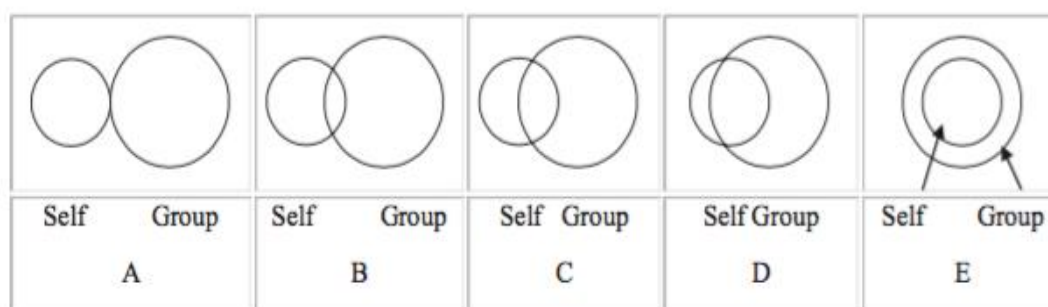


Figure 3. Visual Identity Fusion (item E; Swann et al., 2009).

Strength of identity fusion (i.e., military group identity) as it is conceptualized here, reflects the amount of fusion a Servicemember may have experienced while in the military. Those who have been deployed, and in particular those who have experienced combat, will likely

endorse greater identity fusion because deployment provides many unique opportunities to bond with one's unit in life-or-death situations (where trust and group cohesion are important for survival) and for shared self-expansion as novel, exciting, and challenging environments and situations are navigated together. For example, a study by Whitehouse and colleagues (2014) found that combat "fighters" were more likely to demonstrate stronger fusion when compared to "nonfighters" who were in similar environments but did not engage in combat (Whitehouse, McQuinn, Buhrmester, & Swann, 2014). In addition, of these combat fighters, 45% reported being more fused with their battalion than their own families (Whitehouse et al., 2014).

Fused individuals tend to retain a strong military group identity even when environmental supports are no longer present (e.g., transition to civilian society; Hawkins, McGuire, Linder, Britt, 2015; Swann et al., 2012). Holding strong identity fusion while in a military context supports self-concept clarity and is adaptive in the military context, as this would promote pro-group behaviors and devotion to the mission (Swann et al., 2010; Swann et al., 2012). Once in civilian society the environmental supports are no longer present for the military group identity but, in general, fused individuals will remain fused based on identity fusion theory (Swann et al., 2012). Thus, those holding a strong military identity will likely continue to hold a strong military identity regardless of environment, and instances of leaving the group due to "disbanding of the group or completing's one's terms of service with the group" may be "emotionally wrenching, as they theoretically entail substantial restructuring of the self-concept, one's relation to others, and even the very meaning of one's actions." (Swann et al., 2012, p.450). Swann et al. (2012) also suggests that identity fusion is one theoretical explanation why Veterans may experience reintegration difficulties: "the state of fusion is so all consuming, it may compromise people's capacity to compartmentalize their group-related experiences...The single-mindedness of highly

fused individuals may thus impair their ability to display sufficient role flexibility needed to maintain healthy relationships with individuals who are not members of the fused group.” (p. 450). While Swann et al. (2012) discuss the movie *The Hurt Locker* and make a theoretical argument that highly fused Veterans (with strong military identities) are likely to experience increased reintegration difficulties, they do not provide any empirical data to support this prediction. No studies have yet tested this theoretically-based idea.

Current Study

Rationale. Military members experience augmentation of the self-concept through novel, challenging experiences when integrating into the military culture (Coll, Weiss, & Yarvis, 2011). This would include the military culture broadly, subcultures (e.g., Army, Navy), and specific relationships developed within their units. Basic training offers the first immersion into military culture and active Servicemembers continue to be surrounded by military culture throughout service. Deployed military members often develop close relationships (e.g., friendships, unit cohesion), endure challenging experiences, and develop a complex behavioral repertoire consistent with military cultural values (i.e., engaging in self growth which is maintained in an environment supporting acquisition and honing of useful skills). As one’s self-concept increases, the structure, or clarity, of the self-concept becomes well defined while immersed in the military culture. It may be hypothesized that those who strongly identify with the military culture have integrated more military cultural characteristics into their self-concept while serving (i.e., via self-expansion). This is not to say that military members necessarily develop close relationships with *each* military member, rather, the self-concept integrates the group culture characteristics. Although some will develop a strong emotional attachment to individual members (particularly within their unit), individuals tend to also develop emotional attachments with the group as a

whole (Coats et al 2000; Swann et al., 2012). Some members may incorporate the military culture more strongly within their self-concept (i.e., identity fusion). Identity fusion is adaptive while serving in the military, as this would promote unit cohesion and dedication to the mission. Further, individuals who demonstrate stronger identity fusion will be more willing to self-sacrifice for the group as a whole or for other members of the group. In addition, the individual will likely report that other group members would do the same for them (Swann et al., 2012), strengthening the sense of group cohesion.

It has been well established that when an important relationship (e.g., Lewandowski et al., 2006; Slotter et al., 2010) or group membership (e.g., McIntyre, Mattingly, & Lewandowski, 2015; Slotter et al., 2015) ends, individuals experience disruption to their self-concept clarity. As a relationship develops, individuals tend to include others in the self through new experiences, perspectives, and resources. Thus, as a relationship comes to an end (i.e., one-on-one relationships or group membership), individuals often experience weakened self-concept clarity. This is particularly true for those who have been committed to a particular relationship or group, and have enmeshed the other person or group into their self-concept. The loss of aspects of the self-concept may occur for various reasons such as the removal of access to environmental supports or suppression of particular characteristics to better fit with the present context (e.g., civilian environment) or relationships. While theories and studies have helped us understand self-concept and self-concept change, little empirical data exists to elucidate how these factors contribute to reintegration difficulties among Veterans.

Purpose. The purpose of this study is sevenfold. First, to investigate whether experiencing greater previous military self-expansion is a significant predictor of greater reintegration difficulties (in line with past literature on self-expansion and the loss of a source of

self-expansion). Second, to examine whether previous military self-expansion is a significant predictor of identity fusion (in line with self-expansion and identity fusion theories). Third, to investigate whether greater identity fusion is a significant predictor of greater reintegration difficulties (in line with identity fusion theory and a theoretical prediction by Swann et al., 2012). Fourth, the study will analyze whether identity fusion mediates the hypothesized positive relationship between previous military self-expansion and reintegration difficulties (as theoretically consistent with self-expansion and identity fusion theories). Specifically, will there be a greater positive association between previous self-expansion and reintegration difficulties for Veterans who hold greater identity fusion. Fifth, to examine whether previous military self-expansion is a significant predictor of lower self-concept clarity (in line with past literature on self-expansion and self-concept clarity). Sixth, to investigate if lower self-concept clarity will be a significant predictor of greater reintegration difficulties (in line with what is known about the consequences of lower self-concept clarity). Lastly, the seventh purpose of this study was to investigate whether weaker self-concept clarity mediates the hypothesized positive relationship between previous self-expansion and reintegration difficulties (as theoretically consistent with past literature on self-expansion and self-concept clarity).

Significance. As previously mentioned, Veterans often experience some reintegration difficulties regardless of having an injury or psychological diagnosis or not (Sayer et al., 2015). Further, Veterans who may be struggling with reintegration into civilian society often do not receive the support needed from practitioners (Sayer et al., 2014). This is not to suggest that VA Healthcare Systems and other medical facilities are failing; rather, it is suggested that there remain gaps in our understanding of Veteran reintegration. Additionally, it may suggest that ongoing reintegration support for Veterans is warranted after military separation and remain

available over their lifetime. Research is needed to help identify which Veterans are particularly at risk for high levels of reintegration difficulties and/or long-term difficulties.

The prevalence of adjustment problems is understudied, particularly for Veterans who are not within a VA Healthcare System (Sayer et al., 2014). The recruitment and data collection methods of this study did not utilize a VA Healthcare Database, allowing for a sample of Veterans who used various methods of healthcare (i.e., VA, public and private medical centers, and those who may have not sought any health care services). It has been suggested that research on Veterans who utilize the VA Healthcare System may not be generalizable to the Veterans who do not seek services from the VA (Sayer et al., 2010; Sayer et al., 2015). This is a strength of this study, as many studies within the current literature investigating Veteran reintegration (and often focusing on psychopathology or medical concerns) have done so in a VA context.

Investigating reintegration difficulties from a cultural perspective will offer additional insights into potential avenues for debriefing screenings, treatment approaches, and modification of current reintegration programs. This is also true for assessing the role of self-concept clarity on Veteran reintegration. In addition, both retrospective and military self-expansion, to the best of my knowledge, has not been studied in relation to either military group identity or self-concept clarity in a Veteran sample. While self-concept clarity, identity fusion, self-expansion, and reintegration are not novel constructs, in previous literature they have not been studied together (e.g., self-concept clarity, reintegration) nor have they been investigated within a Veteran sample (e.g., self-concept clarity, self-expansion). Thus, while the hypotheses of the current study are based on strong theoretical grounds, they are novel hypotheses and offer important novel information to the literature in several domains. The current study utilized a cross-sectional design to evaluate the stated hypotheses below. There are both strengths and

limitations to this study design, and this will be discussed in the limitations section of the document.

Specific Aims and Hypotheses for the Study.

Aim 1: Investigated whether previous military self-expansion was a significant predictor of reintegration difficulties.

Hypothesis 1: Veterans who reported greater previous military self-expansion would endorse greater reintegration difficulties.

Aim 2: Investigated whether previous military self-expansion was a significant predictor of identity fusion.

Hypothesis 2: Veterans who reported greater previous military self-expansion would report greater identity fusion.

Aim 3) Investigated if those who endorse greater identity fusion would endorse greater reintegration difficulties.

Hypothesis 3: Veterans who endorsed greater identity fusion would endorse greater reintegration difficulties.

Aim 4: Investigated if identity fusion would mediate the relationship between previous military self-expansion and reintegration difficulties.

Hypothesis 4: Identity fusion was hypothesized to mediate the relationship between previous military self-expansion and reintegration difficulties.

Aim 5: Investigated whether previous military self-expansion was a significant predictor of self-concept clarity.

Hypothesis 5: Veterans who reported greater previous military self-expansion would report lower self-concept clarity.

Aim 6: Investigated whether lower self-concept clarity was a significant predictor of reintegration difficulties.

Hypothesis 6: Veteran who endorsed lower self-concept clarity would endorse greater reintegration difficulties.

Aim 7: Investigated if self-concept clarity would mediate the relationship between previous military self-expansion and reintegration difficulties.

Hypothesis 7: Self-concept clarity was hypothesized to mediate the relationship between self-expansion and reintegration difficulties.

CHAPTER II

METHODOLOGY

Power Analyses

To obtain an estimate of the needed sample size for the proposed analyses, *a priori* power analyses were completed utilizing a combination of G*Power and a review of the literature. This was done to obtain an appropriate sample size for the current study from effect sizes of past studies utilizing similar measures, samples (i.e., Veterans), and outcome variables [identity fusion (WIS-R), self-concept clarity (SCC), and reintegration (M2C-Q)].

As previously discussed in Chapter One, McIntyre and colleagues (2014) investigated the relationship between previous workplace self-expansion and current self-concept clarity of 73 civilians. Subjects endorsing highly expanding jobs reported weaker self-concept clarity ($B = -.25, p = .03$) than those who reported lower expanding jobs (McIntyre et al., 2014). Another study investigated the relationship between role exits and self-concept clarity ($r = -.098, p < .01$) among civilians, and role exits were predictive of weaker self-concept clarity ($B = -0.078, p < .005$; Light & Visser, 2013). Both studies suggest a small to medium effect between previous self-expansion and current self-concept clarity, as well as previous roles and current self-concept clarity.

In regard to group identity, Besta and colleagues (2016) conducted three studies focusing on the relationship between group identity and self-concept clarity in Polish civilians. The first (365 subjects) and third (144 subjects) studies found there to be a positive association between country group identity and self-concept clarity ($r = .19, p < .001$; $r = .26, p < .001$ respectively). The second study included 138 subjects and also found a positive association between family

group identity and self-concept clarity ($r = .22, p < .001$). These studies found a small effect of the association between group identity and self-concept clarity.

In regard to reintegration, Sayer and colleagues (2011) reported medium to large effect sizes in a sample of 1,292 Veterans using the Military to Civilian Reintegration Questionnaire (M2C-Q) Sayer et al., 2011). Thomas (2014) investigated the association between sense of community within civilian life (similar to the construct of group identity) and reintegration difficulties using the Military to Civilian Reintegration Questionnaire (M2C-Q; $r = .476, p < .01$) in a sample of 131 Veterans, supporting the medium to large effect reported by Sayer and colleagues (2011).

Due to the novel hypotheses, utilizing a number of measures including a relatively novel measure, the WIS-R, and a relative lack of research on this particular sample using the identified constructs, a conservative approach was taken to estimate the needed sample size. Due to there being fewer female Veterans compared to male Veterans, an oversampling of female Veterans was conducted (see Participants section). Previous research on the constructs of interest suggested effect sizes ranging from small to large, and with sample sizes ranging from 73 to over a thousand subjects.

G*Power analysis estimated the needed sample size for the present study and planned statistical analyses (e.g., multiple regressions, mediated analyses). Utilizing power of $1 - \beta = 0.8$, setting the alpha level at 0.05, and using a small effect size ($f^2 = 0.02$) to be conservative, a power analysis was completed for each planned sequential multiple regression. These *a priori* power analyses varied in number of predictors and covariates, and several hypothetical analyses accounting for up to 20 total predictors and covariates (most demographical variables not included in hypotheses unless supported by literature reviewed in Chapter One). While 20 total

predictors is a large number and conservative, this was selected *a priori* due to the amount of potential covariates to account for. As will be described in the Results section, the largest number of covariates included was in Hypothesis 4 with 10 covariates included. More specifically, for Hypothesis 4 there was one predictor, one potential mediator, 10 covariates, and one criterion variable.

With this information, G*Power analyses suggested samples ranging from 395 to 485. Thus, the largest sample size suggested via *a priori* power analyses (utilizing a conservative small effect size) was 485 subjects. To ensure that there was sufficient power accounting for potential issues with data (e.g., incompletes, failing attention checks, failing military and human checkpoints) a proposed sample size of 550 subjects was utilized for this study. This conservative methodology (assuming a small effect size, using the highest sample size across power analyses, and increasing the sample size further to account for potential data issues) ensured that there was sufficient power to detect the theorized effects.

Participants

A minimum age of 17 years old with parental consent is required for military enlistment, or 18 years old without parental consent. Enlistment allows United States citizens or legal permanent residents with a green card physically living in the United States to join the military. In the United States, 18 years old is considered a legal adult; thus, participants included in this study were United States resident adults and legal permanent residents with a green card living in the United States, aged 18 years or older. The subjects needed to have previously served in the United States military during the Post 9/11 period (i.e., beginning on September 11, 2001 and after).

The study focused on those from the Post-9/11 period because, in general, these individuals are notably different than the Pre-9/11 period Veterans. For example, there are more female Veterans (Department of Veterans Affairs, Women Veterans Task Force, 2016) and female combat Veterans (Sayer et al., 2014) in the Post 9/11 period. The following statistics were presented as the original reference presented them, as such, some may be rounded to whole numbers, others to one or two decimals places. In 2012 it was estimated that approximately 9% of Veterans identify as female (Department of Veterans Affairs, Women Veterans Task Force, 2016; Sayer et al., 2014), and in 2013 it was estimated that approximately 20% of Veterans were female (United States Department of Labor, 2013). Whereas in the Pre-9/11 period, approximately 4% of the Veteran population was female (United States Department of Labor, 2013).

In anticipation of obtaining more male than female Veterans data (as there are significantly more male than female Veterans), oversampling of females was conducted to ensure that the final sample would be relatively balanced among the Veteran participants. Specifically, once the study obtained approximately half (around 275) males, females were targeted, and males were screened out. This was done by having two separate studies created on the Amazon Mechanical Turk (MTurk) platform (see Procedures section below for additional information), one for males and one for females. MTurk utilizes the demographic information of the subject's profile to determine study fit. For example, the male study was only visible to subjects with a matching profile (i.e., male listed in their demographics).

The Post 9/11 cohort is also more diverse in regard to race compared to Pre-9/11 Veterans (National Center for Veterans Analysis and Statistics, 2016; Sayer et al., 2014). These Veterans experienced longer deployments and a greater number of deployments (National Center

for Veterans Analysis and Statistics, 2016; Sayer et al., 2014). Approximately 67.3% of Post-9/11 male Veterans (compared to 81.4% of Pre-9/11 Veterans) identified as White non-Hispanic. Approximately 20.4% of Post-9/11 male Veterans (compared to 13.1% of Pre-9/11 male Veterans) identified as Non-White non-Hispanic (i.e., Black, American Indian/Alaska Native, Native Hawaiian and Other Pacific Islander, some other race, and two or more races). Lastly, 12.3% of Post-9/11 male Veterans (compared to 5.5% of Pre-9/11 male Veterans) identify as Hispanic (National Center for Veterans Analysis and Statistics, 2016; Sayer et al., 2014). For female Veterans, 56.8% Post-9/11 (compared to 72.4% Pre-9/11) identified as White non-Hispanic, 30.1% Post-9/11 (compared to Pre-9/11 21.8%) identified as non-White non-Hispanic, and 13.1% Post-9/11 (compared to 5.9% Pre-9/11) identified as Hispanic (National Center for Veterans Analysis and Statistics, 2016; Sayer et al., 2014). Subjects were required to have been deployed at least once to a combat deployment during their service in the military. While 18 years old may be viewed as young for a Veteran, it is possible that an individual aged 18 years old has experienced a deployment (e.g., if enlisted when 17 years old). Definitions were included in the informed consent to reduce ambiguity of qualifications:

“Post-9/11 Veteran: any person who served for any length of time in any military service branch from September 11, 2001 and after.”

“Combat Deployment: ordered to foreign soil or water to participate in any direct or support activity against any enemy. A Veteran who experienced any level of hostility for any duration resulting from offensive, defensive, or friendly fire military action

involving a real or perceived enemy in any pre- or post-designated theater of combat operations.”

“**Current Veteran:** here, is defined as an individual who is separated from the military (e.g., end of contract, retired, so forth).”

The current research had two phases (see Procedures for additional details): a Pilot study (Phase 1) and Full Launch (Phase 2). For Phase 1, 33 individuals attempted the Pilot study, with 21 (63.63%) passing the computerized coded checkpoints. Of those 21, two (9.52%) were omitted from the dataset due to skipping one or more questionnaires within the study, and four (19.05%) were omitted due to failing military checkpoints throughout the study (e.g., incorrect answers for branch and rank pairings). This resulted in 15 individuals included in the Pilot study dataset (see Figure 4). A total of 1897 individuals attempted Phase 2 study. Of those, 815 (42.96%) made it through the human and military checkpoints coded in the beginning of the Full Launch. A total of 231 individuals who made it through checkpoints at the beginning of the study (29.34%) withdrew from the study somewhere between withdraw option one and withdraw option 23. Thus 584 individuals completed the study. Of these completers, there were 28 individuals (4.79%) who were disqualified due to failing the boot camp manualized checkpoint, 22 (3.77%) who were disqualified due to having missing questionnaires, and 15 (2.57%) who were disqualified due to failing the military

verification of consistent answers at the beginning and end of the study (e.g., year of service asked at beginning and end of study did not match). This resulted in 519 individuals included in the Full Launch dataset (see Figure 5). With the Pilot study ($n = 15$) and Full Launch study ($n = 519$) combined, there was a total of 534 individuals in the project's dataset (see Figure 6).

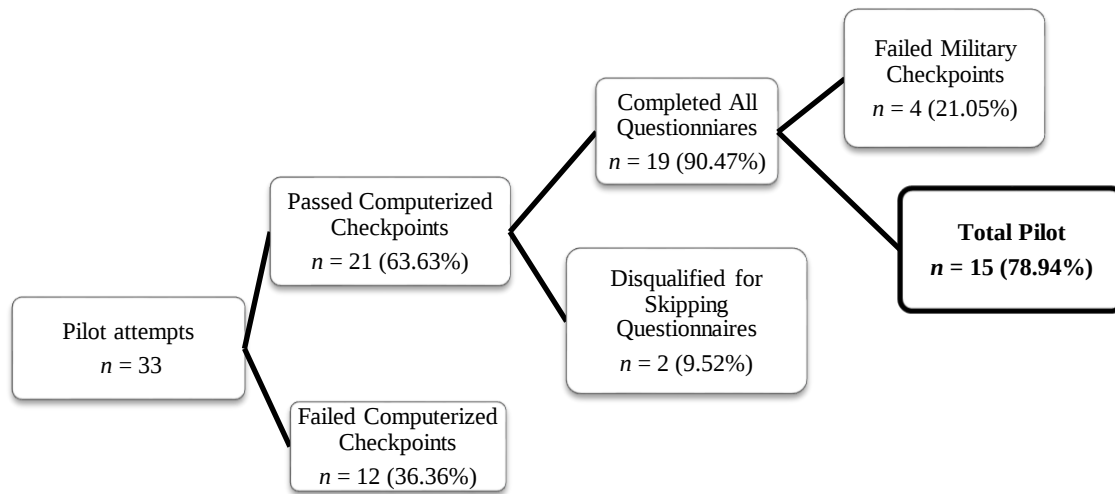


Figure 4. Visual representation of the Pilot study. Percentages represent the percent accounted for compared to the previous step.

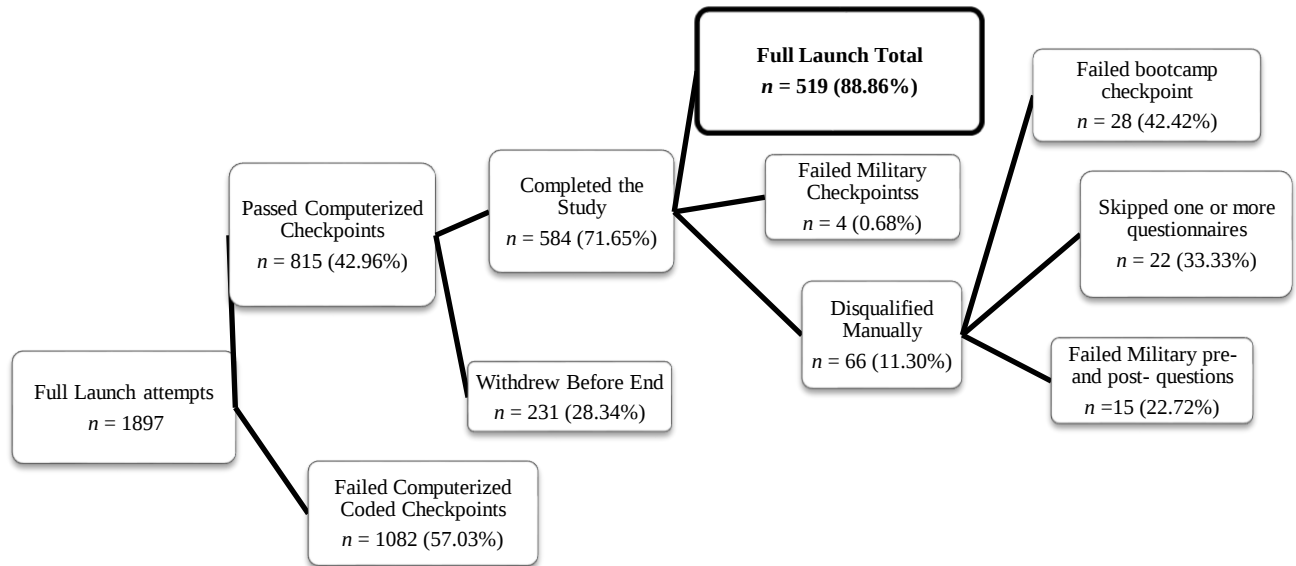


Figure 5. Visual representation of the Full Launch. Percentages represent the percent accounted for compared to the previous step.

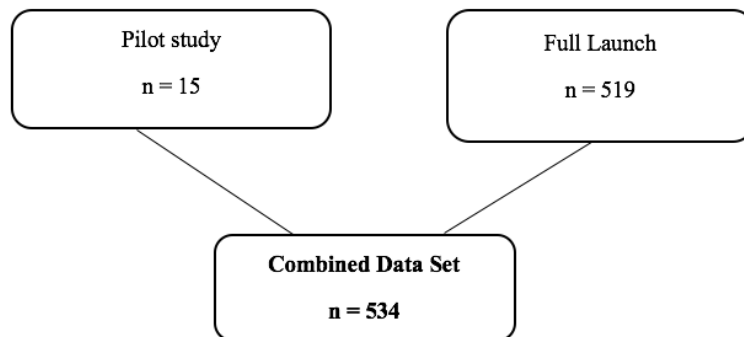


Figure 6. Visual of combined data set.

Original descriptives of the full data set may be found in Table 1 and Table 2 below. Some recoding was conducted due to the small ns in a few of the grouping categories, see the Identification of Covariates via ANOVAs (Step 1) subsection in Chapter III (Results) and Table 7 for a detailed explanation and the final descriptives of the full data set.

Table 1
Grouping Descriptives of the Full Sample

Variable		Percentages (n)
% Female	----	43.63% (233)
% Women Gender Identity	----	43.63% (234)
Race/Ethnicity		
	%European American/Caucasian/White	73.03% (390)
	%African American/Black	11.42% (61)
	%Hispanic American/Latino	6.36% (34)
	%Asian American	2.99% (16)
	Native Hawaiian/Pacific Islander Other	1.12% (6)
	%Native American/American Indian	0.93% (5)
	%Other	0.74% (4)
	%Multi Race	41.57% (222)
Relationship Status		
	%Married	48.10% (257)
	%Remarried	0.18% (1)
	%Legally Single	32.22% (172)
	%Divorced	7.86% (42)
	%Widowed	0.74% (4)
	%Separated	0.2.62% (14)
	%Living with SO	8.98% (48)
Income		
	< 10k	3.93% (21)
	11-20k	10.11% (54)
	21-40k	24.71% (132)
	41-60k	29.02% (155)
	61-80k	19.10% (102)
	81-100k	6.92% (37)
	>100k	4.68% (25)
	Prefer not to disclose	1.49% (8)
Branch		
	Army	63.29% (338)
	Air Force	13.10% (47)
	Navy	11.23% (60)
	Marine Corps	8.80% (47)
	Coast Guard	2.05% (11)
Component		
	Active FT	75.46% (403)
	Active PT	4.86% (26)
	Reserves	11.46% (61)
	National Guard	7.49% (40)
	Active Guard Reserves	0.74% (4)
% Yes TBI Endorsement	----	4.11% (22)
% Deployed More than Once	----	48.50% (259)

Table 2
Continuous Descriptives of the Full Sample

Descriptives of Sample	<i>M</i>	<i>SD</i>	Mode	Min	Max
Age	34.35	7.82	29	20	64
Length of Service (years)	7.02	5.28	4	1	32
Length Since Separation (years)	5.33	3.99	2	1	16
Length Since Last Deployment (years)	6.91	4.13	7	1	16
Longest deployment (months)	12.56	2.36	12	6	21
Length of Bootcamp (weeks)	9.43	2.17	8	6	13

Measures

The measures that were included within the survey questionnaire are listed below. The Verification of Military Service and Social Desirability Scale- 17 (SDS-17) were presented at the beginning of the study, as the first questionnaires. This is because verification of military service was required for eligibility and before the individual was able to complete the rest of the questionnaires. This verification of military service approach was based on previous literature utilizing a Veteran MTurk sample (Lynn, 2014). The SDS-17 was presented after the military verification checkpoint and prior to any of the other questionnaires. This is standard procedure when assessing for sensitive topics such as mental health (Arditte, Cek, Shaw, & Timpano, 2016; Peer, Vosgerau, & Acquisti, 2014), so that the social desirability assessment cannot be influenced by reading about or responding to these sensitive questions. All other measures appeared in a randomized order on MTurk, randomized by Qualtrics (i.e., not as they are listed below). Below, each measure is described, a brief overview of each measure's psychometrics is presented, and the reason each measure was selected is provided.

Verification of Military Service (Military Verification Screening; MIS; Appendix D). Questions were utilized at the beginning of the survey to verify military service through queries requiring knowledge of military rankings specific to the subject's identified branch. Inclusion of a military verification checkpoint was based on a previous study using a MTurk Veteran sample (Lynn, 2014).

Social Desirability Scale - 17 (SDS-17; Stöber, 2001; Appendix E). King and Brunner (2000) noted positive impression management, or socially desirable responding, often occurs with “socially sensitive questions” (King & Brunner, 2000, p. 94). Military members may be hesitant with responses that suggest weakness, as this could be in opposition to the military cultural values referenced in chapter one. In addition, sensitive information may be more difficult for subjects to endorse openly. As such, a measure of socially desirable responding was included in this study due to other measures asking questions about psychological health (e.g., screening for depression). While the Marlowe-Crowne (MC) was previously considered the “gold standard” for socially desirable response assessment, the measure was lengthy (i.e., 33-items) and was culturally bound for several items (Blake, Valdiserri, Neuendorf, & Nemeth, 2006; Stober, 2001). Thus, the SDS-17 was selected for this study.

The SDS-17 is a 16-item scale (original scale contained 17 items and has since been revised) that was developed to assess socially desirable responses (i.e., presenting the self in a positive light). The original Item 4, “I have tried illegal drugs (e.g., marijuana, cocaine, ect.)” was dropped by Stober (2001) as the result of a SDS-17 validation study based on four studies' consistently demonstrating item-total correlations around zero (Stober, 2001).

Respondents select either true or false in response to items such as, “I always eat a healthy diet.” The option (i.e., true or false) selected by the individual is their response to

whether the item is representative of them or not. Items 2, 3, 4, 7, 8, 9, 11, 12, 13, and 15 receive one point for true responses, and items 1, 5, 6, 10, 14, and 16 receive one point for false responses. All items are then summed for a total score. Scores range from 0 to 16, with higher scores representing more socially desirable responding. Cronbach's alpha was 0.80, with good convergent validity with other validated impression management scales (e.g., Marlow-Crowe Scale; Stober, 2001). The Cronbach's alpha was 0.79 for the current study.

Warrior Identity Scale - Revised (WIS-R; Lancaster & Hart, 2015; Appendix F).

Lancaster and Hart (2015) developed the WIS to assess military identity. The scale includes modified items from both work-related and ethnic identity scales to encompass the multifaceted domains of military identity, rather than solely assessing work identity. The original measure had 66-items and has since been truncated into a revised version with 31-items to remove redundancy. Lancaster and Hart (2015) initially developed the WIS utilizing a modest sample of Post 9/11 Veterans ($N = 90$) via an online survey. They utilized a collective identity framework developed by Ashmore and colleagues (2004) to begin the development of a scale to assess warrior identity. The framework held seven domains: self-categorization, evaluation, importance, attachment and the sense of interdependence, social embeddedness, behavioral involvement, and content and meaning. Lancaster and Hart (2015) focused on evaluation, attachment, and sense of interdependence to select the initial 66 items for the WIS-R:

“... **Evaluation** refers to both public and private attitudes and judgments that individuals have toward their group.”

“...**Attachment** and the **sense of interdependence** describes the emotional involvement individual have with their group, including a sense of mutual fate, affective commitment, and interconnection of self and others (Lancaster & Hart, 2015; pg. 84).”

Collaboration with experts within the field was done to select the items and wording.

The WIS-R was truncated based on the above focal area of evaluation, attachment, and sense of interdependence:

“A subset of the items and scales were included in the current project: public (four items; $\alpha = .866$) and private regard (seven items; $\alpha = .756$) toward the military were adapted from the Multidimensional Inventory of Black Identity (Sellers et al., 1997), feeling a sense of pride toward the military (four items; $\alpha = .821$), feelings of interdependence with other military members/Veterans (six items; $\alpha = .780$), and viewing members of the military/Veterans as family” (three items; $\alpha = .828$; adapted from Glockner, 2007; Lancaster & Hart, 2015, p. 85).

From the three focal areas, there were five major domains that were identified within the WIS-R: private regard, public regard, pride, interconnected, and family that were developed from other measures of identity described. Lancaster and Hart (2015) included measures of depression, PTSD, both positive and negative affect, and post-deployment social support. There were five major domains that were identified within the WIS: private regard, public regard,

pride, interconnected, and family. Social support and positive affect were both positively predictive of pride, and social support was also positively predictive of public regard. Interconnected and family subscales were positively predicted by depression and PTSD.

A more recent validation study by Lancaster, Kintzle, and Castro (2018) utilizing confirmatory factor analyses further supported the underlying domains outlined above with a sample of 1151 military Veterans, with 495 of them having been in combat. Unfortunately, since the current study took place, the WIS-R has been modified further in wording to remove redundancy. For example, “I am proud to have served in the military” was not unique from “I feel good about my military service” (Lancaster, Kintzle, & Castro, 2018). A few items were also added such as “I have spent time trying to find out more about the military,” making the measure a 34-item questionnaire (Lancaster, Kintzle, & Castro, 2018).

An example item from the WIS-R used for the current study is “Overall, having served in the military has very little to do with how I feel about myself.” Items are based on a four-point Likert-like scale ranging from 1 (strongly agree) to 4 (strongly disagree). The WIS-R total score is obtained by reverse scoring items 5, 7, 15, 16, 17, 21, 23, 24, and 30, and then summing the total of all scores. The range of scores is 31 to 155, with higher scores indicating greater identity fusion.

This measure was selected for the current study because it was developed from the lens of military identity, referred to as identity fusion in the current study, being a combination of ethnic and work identity, not simply a work identity. While it is a novel measure, it has demonstrated high internal consistency ($\alpha = 0.87$; Lancaster & Hart, 2015) for total score. The current study demonstrated high internal consistency as well for total score, with a Cronbach’s alpha of 0.90. Lancaster and Hart (2015) noted that strong military identity has been associated

with overall post-deployment functioning. Further, according to Lancaster and Hart (2015), “Exploring Veteran identity in ways similar to studying ethnic identity has yielded significant results and is a method worthy of future inquiry” (Lancaster & Hart, 2015, p. 86).

Military to civilian questionnaire (M2C-Q; Sayer et al., 2010; Sayer et al, 2011; Appendix G). The M2C-Q was developed by Sayer and colleagues (2011) to tap into six major domains of reintegration identified by a previous study (Sayer et al., 2010). The six areas are interpersonal relationships with family, interpersonal relationships with friends and peers, community involvement, self-care, leisure activities, and perceived meaning in life over the past 30 days. Sayer and colleagues (2011) conducted a confirmatory factor analysis to determine if the six areas of reintegration could indeed be combined to assess reintegration difficulties and found a one-factor solution (Sayer et al., 2011). This scale was developed to offer an overall reintegration measure for those with or without a physical injury. Whereas previous scales of reintegration were developed for samples of Veterans in rehabilitation settings (i.e., physical injuries; Sayer et al., 2011). The M2C-Q is comprised of 16 items utilizing a five-point Likert scale ranging from 0 (no difficulty) to 4 (extreme difficulty) that can be completed in approximately five minutes or less. The range of scores is zero to 80, with higher scores representing increasing reintegration difficulties. These items do include an option to respond “does not apply” for items that focus on interpersonal relationships (e.g., relationship with children). According to a 2011 validity study, the measure demonstrated high internal consistency ($\alpha = 0.95$; Sayer et al., 2011). In the current study, the measure also demonstrated high internal consistency with a Cronbach’s alpha of 0.95. Sayer and colleagues (2011) also noted that a majority of the Post-9/11 combat Veterans ($N = 745$) “... the estimated mean M2C-

Q score item-level was 1.36 ($SE = 0.05$), indicating a little to some reintegration difficulties on average” (Sayer et al., 2011).

This measure was selected because it was initially developed to fill a gap in the literature, providing a reintegration measure that included the five branches of the military, was not limited to those with or without a military-related injury, tapped into functional areas not assessed by other measures (i.e., other measures focused on injury or psychological diagnoses), and utilized a sample of Post 9/11 combat Veterans. The measure was initially pilot-tested on 87 combat Iraq-Afghanistan Veterans. It was then reevaluated utilizing 754 combat Veterans (Sayer et al., 2011). Further, while those who screened positive for PTSD endorsed more reintegration difficulties than those who screened negative, individuals with a negative PTSD screen also endorsed significant difficulty in several domains of reintegration, highlighting the utility of the measure regardless of PTSD status. In addition, the reintegration scale taps into functional areas that are not normally assessed by health care providers as an indicator of reintegration difficulties, providing a more complete picture of the variable (Sayer et al., 2010).

Self-Concept Clarity Scale (SCC; Campbell et al., 1996; Appendix H). The SCC is a 12-item scale assessing how clearly defined and stable an individual perceives their self-concept to be. Responses to items are based on a five-point Likert-like scale, between 1 (disagree very much) and 5 (agree very much), with a range of scores between 12 and 60. Reverse scoring is required on items 1, 2, 3, 4, 5, 7, 8, 9 10, and 12. Items are then summed to obtain a total score, higher scores on the SCC corresponding to a clearer sense of self. The SCC measure demonstrated high internal consistency ($\alpha = 0.88$) and factorial integrity (i.e., a single general factor; Campbell et al., 1996). An example item is “In general I have a clear sense of who I am.” Individuals endorsing weaker self-concept clarity are likely to report variability in self-

descriptions (Campbell et al., 1996). The SCC was selected for this study as it taps into the construct of interest (i.e., how well the self is known). In the current study, SCC also demonstrated high internal consistency with a Cronbach's alpha of 0.91.

Adapted Workplace Self-Expansion Questionnaire (W-SEQ; McIntyre, Mattingly, Lewandowski, & Simpson, 2014; Appendix I). McIntyre and colleagues (2014) adapted the Self-Expansion Questionnaire (SEQ; Lewandowski & Aron, 2002) to assess workplace self-expansion. For example, McIntyre and colleagues (2014) modified “your partner” to read “your job.” The W-SEQ maintained the original SEQ high internal consistency ($\alpha = 0.96$).

Additionally, in a second study conducted by McIntyre and colleagues (2014), they again used the W-SEQ but also modified verbs for each item to reflect assessment of past workplace self-expansion (i.e., changing “does” to “did” on items). The context modification (i.e., workplace in place of relationship) and verb modification (i.e., past tense in place of present tense), demonstrated high internal consistency ($\alpha = 0.89$). In regard to the modified use of the SEQ (i.e., W-SEQ), McIntyre and colleagues (2014) also utilized MTurk as the data collection instrument for their two studies.

The W-SEQ was selected as the measure of retrospective self-expansion for the current study due to similarities between their study and the proposed study hypotheses (i.e., regarding previous self-expansion and current self-concept clarity). The W-SEQ measure assesses how much an individual has experienced expansion on 14 items utilizing a Likert-like scale (1 being “not very much” to 7 being “very much”). Scores are summed to obtain a total score and the possible range of scores is 14 to 98, with higher scores indicating greater past self-expansion. For the current study, the past tense modification was maintained; however, “workplace” was modified to read “military experience.” For example, the item “How much did your job help to

expand your sense of the kind of person you are” was modified to “How much did your military experience help to expand your sense of the kind of person you are.” In the current study, the W-SEQ with the context modification (i.e., military in place of workplace) and verb modification (i.e., past tense in place of present tense) explained above, demonstrated high internal consistency with a Cronbach’s alpha of 0.94.

Post deployment Social Support subscale of the Deployment Risk and Resilience

Inventory-2 (PDSS of the DDRI-2; Vogt, Smith, King, & King, 2012; Appendix J). The DDRI-2 is an assessment that offers 17 subscales that may be used independently or together. The scales were developed to identify factors that impact Veteran adjustment after experiencing a deployment. Each scale takes between one to three minutes to complete depending on the individual. The developers strongly recommend excluding the actual scale name (e.g., post-deployment social support scale), and rather simply include the subscale section (e.g., PDSS). Vogt and colleagues (2012) noted this may reduce response biases (Vogt et al., 2012).

The PDSS (Appendix I) was developed to assess the degree of social support a Veteran endorses after returning to the community (i.e., support from civilians, including family, friends, and broad community). Specifically, the measure taps into both emotional support and instrumental support. Emotional support is the amount of “...understanding, companionship, a sense of belonging, and positive regard” an individual receives (p. 7). While instrumental refers to the amount of “tangible aid” (i.e., resources, assistance) an individual obtains from the support systems (p.7). There are 10 items with a Likert-like scale in which the individual is able to select from one (strongly disagree) to five (strongly agree). The items are summed to obtain an overall score. The scores range from 10 to 50, with higher total scores suggesting greater social support received since return. According to Vogt and colleagues (2012) there is no consistent evidence of

ceiling or floor effects. Based on the development, and revision, of the subscale, internal consistency was high ($\alpha = .90$) and demonstrated good construct validity in the validation studies conducted by Vogt and colleagues (2012). In the current study, the scale demonstrated high internal consistency with a Cronbach's alpha .91.

Combat Experiences subscale Deployment Risk and Resilience Inventory-2 (here combat experiences subscale is referred to as DRRI-2; Vogt et al., 2012; Appendix K). The DRRI-2 combat experiences subscale was developed to assess the "...objective events and circumstances and does not include personal interpretations or subjective judgements of the events of circumstances (p. 6)" related to combat experiences while deployed. Combat related experiences include a range of events such as discharging a weapon, being fired at, being attacked or seeing someone else attacked, friendly fire, and patrols in which these events may have occurred. There are 17 Likert-like items in which the individual selects from one (never) to five (daily or almost daily) to indicate how often they had experienced the listed events while on their most recent deployment. The items are summed to obtain an overall score for the subscale. The scores range from 17 to 102, with higher total scores suggesting greater exposure to combat. As mentioned, all subscales of the DRRI-2 demonstrate a range of disbursement and consistently does not evidence concerns regarding ceiling or floor effects. This scale demonstrated good internal consistency ($\alpha = .91$) in the validation studies conducted by Vogt and colleagues (2012). In the current study, the scale had high internal consistency with a Cronbach's alpha of .95.

PTSD Checklist-5 with a Brief Criterion A (PCL-5; Weathers, Litz, Herman, Huska, & Keane, 1993; Weathers et al., 2013a; Appendix L). The PCL-5 was developed to screen for PTSD symptoms and contains 20 items that parallel the symptoms of PTSD as defined in the Diagnostic and Statistical Manual, Fifth Edition (DSM-5; American Psychiatric Association,

2013; Bovin et al., 2015). The PCL-5 takes between five and ten minutes to complete, depending on the person. Respondents select from options zero (not at all) to four (extremely) to best represent how distressed they have felt within the last month. A total score is obtained by summing all items, with a range of scores between zero and 80 (higher scores suggest greater PTSD symptom severity; Weathers et al., 2013a). According to Wortmann and colleagues (2016), a cut point of 33 was most accurate “... to be optimally efficient for detecting PTSD ...” among Veterans when compared to the gold standard Clinician Administered PTSD Scale for DSM-5 (CAPS-5; Weathers et al., 2013b; Wortmann et al., 2016). This cut point demonstrated good sensitivity (.93) and specificity (.72) to correctly identify those diagnosed with PTSD based on the CAPS, and high internal consistency ($\alpha = .91$ to $.95$). In the current study, the scale had high internal consistency with a Cronbach’s alpha of .96.

Center for Epidemiological Studies Short Depression Scale (CES-D-10; Kohout, Berkman, Evans, & Cornioni-Huntley, 1993; Appendix M). The CES-D-10 is a popular measure used in research to screen for depression that was originally created for a study “Established Populations for Epidemiological Studies of the Elderly” in Boston, MA (Kohout, Berkman, Evans, & Cornioni-Huntley, 1993). The CES-D-10 was truncated from the original 20-item CES-D (Radloff, 1977) based on the original factor analysis results from Radloff (1977), and confirmatory factor analysis (Kohout, Berkman, Evans, & Cornioni-Huntley, 1993; Zhang et al., 2012). The CES-D-10 maintained the original CES-D psychometric properties (Kohout, Berkman, Evans, & Cornioni-Huntley, 1993; Zhang et al., 2012). Specifically, high internal consistency ($\alpha = .88$), sensitivity (91%) and specificity (92%) for identifying those with significant depressive symptoms (Zhang et al., 2012). In the current study, the scale demonstrated high internal consistency with a Cronbach’s alpha of .82. The 10-item

questionnaire responses range from “rarely or none of the time (zero; less than one day)” to “all of the time (three; five to seven days).” The total score is achieved by summing across items, with a range of zero to 30, and higher scores suggesting more depressive symptoms present. Quinones and colleagues (2016) reported a cut point of 10 was appropriate for use in Veterans (Quinones et al., 2016).

This measure was selected for the current study because it is brief, has good psychometric properties, has been used in Veteran samples, and does not include a question regarding suicidality. Not including suicidality is important because there will not be any means to follow-up and ensure safety of the subjects if needed. To address potential suicide risk of the subjects, at the end of the study, located on the debriefing page was a list of hotline numbers for individuals who may be at risk and suggestions as to what they could do to ensure their safety.

Alcohol Use Disorder Test (AUDIT; Saunders, Aasland, Babor, de la Fuente, & Grant, 1993; Appendix N). The AUDIT, a 10-item questionnaire was developed to screen for potentially hazardous drinking behaviors. The questionnaire includes questions about consumption, behaviors related to drinking, as well as functional issues and distress related to drinking. Examples of questions are “how often do you have a drink containing alcohol,” “how often during the last year have you found that you were not able to stop drinking once you started,” and “how often during the last year have you had a feeling of guilt or remorse after drinking?” Question one is on a scale of zero (never) to four (four or more times per week), question two is on a scale of zero (1 or 2 drinks) to four (10 or more drinks), questions three to eight are on a scale of zero (never) to four (daily or almost daily). Lastly, questions nine and 10 are on a scale of zero (no), to two (yes, not during the last year), to four (yes, during the last

year). These questions follow the statement “Consider a ‘drink’ to be a bottle of beer, a 4-ounce glass of wine, a wine cooler, one cocktail, a shot (1.25 ounces) or hard liquor (like vodka).”

The AUDIT is scored by summing the items across the questions, with a possible range of zero to 40, with higher scores indicating increasing alcohol abuse. Question three on the AUDIT asks how often the individual had six or more drinks on one occasion, however, there has been concern this may miss female subjects who engage in hazardous drinking (i.e., drinking more than the recommended amount; Bradley et al., 2003). SAMHSA (2015) defined binge drinking as five or more drinks on at least one occasion over the last month and heavy drinking was defined as drinking five or more drinks on the same occasion on five or more days over the last month (SAMHSA, 2015). The National Institute on Alcohol Abuse and Alcoholism (NIAAA) definition of binge drinking as being five or more drinks for males and four or more drinks for females in a two-hour period (NIAAA, n.d.). The cut points used on the AUDIT have been established for alcohol abuse in the general public. Cut point for males is a score of eight or greater and for females a score of seven or greater was found to be appropriate in two study samples (Possemato, Pratt, Barrie, & Ouimette, 2015; Saunders et al., 1993). According to Bradley and colleagues (2003), the AUDIT correctly identified problematic drinking in both males and females with the cut score set at eight, and the scores were not “meaningfully affected by the substitution of the sex-specific” modified AUDIT question three (Bradley et al., 2003). Thus, for this study, the AUDIT was left with the original question three inquiring about six or more alcoholic drinks, rather than making the question biological sex-specific. This decision was also guided by the fact that Bradley and colleagues (2003) study sample was 393 female Veterans, further supporting the decision to leave the original question three content as it was (Bradley et al., 2003). The cut point information above and the rationale presented regarding the

definitions of potentially problematic drinking for males and females, was provided to explain as to why the original question number three was retained.

A German study had a Cronbach's alpha of 0.75 with a sample of 3551 individuals from a general population (Rumpf, Hapke, Meyer, & John, 2002). Studies mentioned within this chapter have demonstrated adequate to good Cronbach's alphas; however, in the current study, this scale had questionable internal consistency with a Cronbach's alpha of 0.68. This alpha was lower than ideal, but when item two, "How many drinks containing alcohol do you have on a typical day when you are drinking," was dropped it raised the alpha to 0.75. Deletion of additional items would not have led to an increased alpha, thus no further items were dropped and the 9-item measure (with item two dropped) was used for this study. The study retained the continuous scale of the AUDIT total score.

Demographic Variables. The civilian demographics survey included items such as age, biological sex, gender identity, ethnicity, and income (see Appendix P) which were collected for descriptive purposes. The military demographics survey included items such as branch (i.e., Army, Navy), rank, number of years served, number of deployments, length of longest deployment, and length of time since exiting the military for descriptive purposes (Appendix P). The military demographics also served as military verification throughout the study. In addition, one item assessed for head injuries that qualified as moderate to severe traumatic brain injury (TBI). A mild TBI was defined as loss of consciousness for seconds and up to 29 minutes. Moderate TBI was defined as a loss of consciousness for 30 minutes to 24 hours, and severe TBI was a loss of consciousness longer than 24 hours (PATE Rehabilitation, 2016). Moderate to severe TBI has been associated with increased reintegration difficulties among Veterans (Sayer

et al., 2015), specifically due to cognitive difficulties such as concentration, attention, and emotional lability, and emotional functioning (Van Dillen, 2010).

Endorsement of both of the following were required to meet criteria to be included as a TBI endorsement: “(1) ...Were you injured from any of the following: fragment/shrapnel wound above the shoulder, vehicular accident or crash (any type of vehicle, including airplanes), fall, blast/explosion (improvised explosive device, RPG, land mine, grenade, mortar, artillery, etcetera), other type of blow to the head, and (2) “Did any injury you received ... result in any of the following immediately afterwards: Being dazed, confused, or “seeing stars”; not remembering the event; losing consciousness; head injury or concussion” (Sayer et al., 2015). The combined questions were included here based on the study by Sayer and colleagues’ (2015) study of combat Veterans. In addition, the questions utilized by Sayer and colleagues (2015) tap into the moderate and severe TBI range of difficulties.

Study Debriefing (Appendix Q). The debriefing page was presented to all individuals who agreed to join the study (i.e., moved into the study after the informed consent process). A debriefing page was included to provide Veterans with a brief overview of the intentions of the study, acknowledgement that some questions may have been difficult to answer regarding their experiences as a military Servicemember or as a Veteran, and to provide resources in case of need for assistance (e.g., seeking connection to treatment and crisis information). Additionally, the debriefing page provides a thank you, how to contact the principle investigator if they have questions or concerns, and a reminder of how to obtain credit.

Procedures

Data Collection. MTurk was utilized as the recruitment medium. MTurk is an online crowdsourcing platform that has been utilized by diverse fields to obtain data from individuals

paid for their participation (Mason & Suri, 2012). According to Buhrmester and colleagues (2011), data collected via MTurk are considered to be “... more demographically diverse than standard Internet samples and significantly more diverse than typical American college samples” (Buhrmester, Kwang, & Gosling, 2011, p.4). Further, data obtained from MTurk are of similar quality when compared to data obtained from other contexts (Buhrmester et al., 2011; Mason & Suri, 2012).

A recruitment post, defined as a Human Intelligence Task (HIT), was made available to the “workers” (i.e., individuals registered with MTurk to complete tasks for compensation), by researchers also known as “requesters” (Mason & Suri, 2012). HITs are presented by MTurk to the workers in a standardized format (Mason & Suri, 2012) allowing ease of reading. Specifically, HITs include the project title (modified for the HIT to reduce face validity), reimbursement for time (e.g., \$1.00 per hour), time allowed to complete (e.g., 60 minutes), and the date of expiration (e.g., November 26, 2016; Mason & Suri, 2012). If an individual would like more information about the HIT, they are able to click on the link. If the HIT link is opened, additional information is provided about the task (e.g., description) and requirements of the worker (e.g., United States resident).

According to Mason and Suri (2012), “a very common qualification requires that over 90% of the assignments a worker has completed have been accepted by the requesters” (Mason & Suri, 2012, p.7). This is one way to screen out workers that frequently engage in undesirable behaviors such as inattentive or random responding to simply complete the task for the funds (i.e., “spammers;” Mason & Suri, 2012). Potential subjects for the proposed study were required to have a 95% HIT acceptance ratio (HAR). According to Peer and colleagues (2014), HARs are as effective at identifying inattentive workers as attention checks (Peer et al., 2014). Thus,

including a slightly higher HAR (i.e., 95), compared to the commonly used 90%, likely prevented spammers from engaging in the study. In addition, Goodman and colleagues (2013) reported that a 95% approval rate is more commonly used as of late (Goodman, Cryder, & Cheema, 2013).

Utilizing MTurk as a research medium comes with advantages. MTurk offers a data collection vehicle that is inexpensive (Mason & Suri, 2012), allows for obtaining more data in a short period of time, and offers a diverse sample (Goodman, Cryder, & Cheema, 2013; Mason & Suri, 2012). According to recent studies, MTurk samples are representative of the United States population in regard to racial/ethnic groups (Miliwakeala, Heen, Lieberman, & Miethe, 2014), income (Miliwakeala et al., 2014), and biological sex (Ipeirotis, 2010; Huff & Tingley, 2015; Miliwakeala et al., 2014). For example, according to the United States Census Bureau (n.d.) estimates approximately 60.1% of the population are White, 13.4% are African American, 1.3% are American Indian, 5.8% are Asian, 18.1% are Hispanic or Latino, and 0.2% identified as Native Hawaiian or Pacific Islander, with 2.5% identifying as two or more races" (United States Census Bureau, n.d.). Studies of MTurk samples sometimes use slightly different categories than the Census, however demographics are generally similar. For example, in 2016, approximately 71.8% of individuals on MTurk identified as White, 7.1% as African American, 5.6% as Non-White Hispanic/Latino, 8.6% identified themselves as Other, and 7.1% did not provide a race (Levay, Freese, & Druckman, 2016). Median household income in the United States was approximately 55,000 dollars (United States Census Bureau, n.d.), and MTurk median household income was 47,000 (Difallah, Filatova, & Ipeirotis, 2018). In regard to biological sex, approximately 51% of the United States population is female (United States Censuses Bureau, n.d.), similarly, approximately 50% of MTurk workers are female (Difallah, Filatova, &

Ipeirotis, 2018). While MTurk samples tend to be fairly representative of the demographics of the United States (and are typically more diverse than university samples), MTurk samples tend to be less racially/ethnically diverse than Post 9/11 Veteran samples (see Participants section above) and more likely to be female (thus our procedure to oversample female Veterans).

The median age of workers is approximately 30 and the mean age is 32 years old (Mason & Suri, 2012). Miliakalea and colleagues (2014) reported that there are 43.8% of individuals between the ages of 18 and 29, 48.9 % are between the ages of 30 and 59, and approximately 4.6% are 60 years or older within the MTurk population (Miliakalea et al., 2014). The MTurk age demographics are similar to the Post 9/11 Veterans demographics. According to the Department of Veterans Affairs (2012), approximately 80% of Post 9/11 Veterans are under the age of 44 years old.

Based on previous literature, military Veterans are an accessible sample through MTurk. For example, Lynn (2014) obtained a sample of 286 Veterans in approximately 26 days, and the goal was to reach 160 Veterans for that particular study. The sample was limited by criteria such as biological sex (males only, screened out 362 individuals who identified as female) and having a rather high HAR (98%); thus, slowing the data collection process and limiting the potential sample size (Lynn, 2014). Morgan (2015) utilized MTurk to obtain a sample of “...Veterans who had experienced an emotionally traumatic or distressing event within the last three years” (Morgan, 2015, p.14). The sample included a total of 362 subjects (with 427 meeting inclusion criteria before data cleaning), with approximately 70% being male and 31% being female (Morgan, 2015). The goal sample size was 200 for the study. Both studies obtained a relatively representative sample for the five branches of the military, and both surpassed their set minimum sample size goal. These previous studies provide evidence for the feasibility of collecting data

from this population via MTurk and that the proposed sample size of 550 would provide adequate power.

Study Logistics. The Idaho State University Institutional Review Board reviewed and approved this study. There were two phases to the study. Phase one was the Pilot study that included a small group from the MTurk Veteran sample. It is important to note that subjects that participated in the Pilot study were excluded from phase two by an exclusion option in the MTurk platform, and worker identification numbers were evaluated by the principle investigator to ensure subjects did not accidentally repeat the study. This was clearly listed as exclusion criteria for phase two in the HIT. The purpose of the Pilot study was to ensure survey readability and clarity from a Veteran perspective, as well as to test the functioning of the questionnaire. The Pilot study also allowed information to be obtained regarding any glitches in technical aspects of the study as well (e.g., errors in Qualtrics, problems with reimbursement). The Pilot study included optional open-ended questions at the end to obtain recommendations from the subjects on how to improve the study (e.g., readability, length). There were no major study changes needed based on the Pilot study. Based on a similarly structured study, the Pilot study sample goal was 10 subjects (Lynn, 2014, p.34); however, 15 subjects met criteria and were included in the Pilot study.

Phase two was the Full Launch of the survey among the MTurk Veteran sample (i.e., 550 sample goal). The Pilot study and the Full Launch both utilized the same procedures and measures outlined above and below. The Full Launch did not require any major revisions from the Pilot study. Optional questions at the end of the Full Launch survey gathered information regarding the Veteran's views of reintegration difficulties, current reintegration programs, and any specific difficulties with separating or since separating from the military. The Full Launch

included 519 individuals after all the data were scored and cleaned, which is described in detail in the Results section (also see Participant section on pg. 44-45 for Figures).

For both the Pilot study and Full Launch study, a MTurk HIT was created and the questionnaires were uploaded to MTurk. The HIT for the Pilot study was titled Post-Military Outcomes 2017 Pilot study and the Full Launch was titled Post-Military Outcomes 2017, reducing the ability to assume the intended purpose of the studies and potential constructs to be assessed. The Pilot study did not specify the required biological sex of the subjects. The Full Launch involved two separate studies posted for males and females, and biological sex was stated as a requirement for specific HITs created during the Full Launch (e.g., female Veteran). Subjects were self-selected and viewed a vague synopsis of the study via the posted HIT (see Appendix A for Pilot study and Appendix B for Full Launch). The HIT clearly stated the qualification for becoming a participant in the study, and the informed consent reiterated the requirements in greater detail. Upon selection of the HIT, subjects were redirected to an external Qualtrics survey through the MTurk platform. The external server (i.e., Qualtrics) was selected over the Mturk internal server survey template to increase confidentiality. Specifically, if the internal server managed by Amazon was selected, this would allow Amazon access to the questionnaires provided by the requester and answers provided by the worker (Mason & Suri, 2012).

Study questionnaire titles were modified to reduce face validity of the construct being assessed as recommended by Vogt, Smith, King, and King (2012). As such, the questionnaire titles and modified titles are both included in the Appendix (See Appendices C through N). For both the Pilot study and the Full Launch, the informed consent page was presented first. This page provided a general overview of the study, and what would be required if the individual

continued with the study (i.e., demands, risks, and benefits). In addition, the consent page informed the individual that the study was confidential, voluntary, and the individual was able to refuse to continue or stop the study at any point. Upon selecting “I Agree” (see Appendix C) the subject was then redirected to the study questionnaire initial page. The informed consent page also provided the contact information for the principal investigator of the study and the Human Subjects Committee at Idaho State University.

The initial study page began with the military verification (i.e., required to order military insignia by rank for identified branch; modified from Lynn, 2014). An additional layer was added for this study and involved timing of the ordering of military insignia allowing for an additional checkpoint for military verification (i.e., longer times would suggest Googling answers). According to Chandler and Shapiro (2016), including a military checkpoint like the one previously described is a useful way to prevent unqualified subjects from misrepresenting themselves simply to participate for payment. Each branch timing question was assessed via boxplot and a histogram to determine if there were outliers that would need to be dropped from the data. There were no outliers and the histogram did not evidence kurtosis or skew (i.e., there was a normal curve), as such, no data was dropped based on these evaluations. See Table 3 below for the mean, standard deviation, minimum, maximum, and mode of each branch timing (in seconds). The bootcamp timing question was also assessed via boxplot and a histogram to determine if there were outliers that would need to be dropped from the data. There were, again, no outliers dropped from the data. Bootcamp timing (seconds) had a mean of 11.47, standard deviation of 4.54, mode of 13, minimum of 3.02, and a maximum of 23.69.

Table 3
Bootcamp branch timing (in seconds).

Branch	N	M	SD	Mode	Minimum	Maximum
Army	338 (63%)	19.21	5.99	23	5	34.11
Navy	60 (13%)	19.35	8.30	23	5	35.34

Marine	47 (9%)	19.92	8.43	14	5	38
Air Force	70 (13%)	19.91	6.56	17	5	38.05
Coast Guard	11 (2%)	15.68	6.97	5	5	28

Additionally, there were military-related attention checkpoints in both the beginning and end of the survey. For example, questions asked about branch, ranking, as well as years served, and were checked for consistency. Military checkpoints, such as length of bootcamp and ranking of branch specific insignia, included timing the subjects until they completed the specific question on that page as previously discussed. This was included as an additional verification for these military checkpoints, as Veterans are able to complete this task quickly due to the information being second nature. Early on during demographic questions there was a “human checkpoint” included to ensure the respondent was a human and not a computer, and this also verified that the subject was attending to the questions. The program reCAPTCHA was used to create this checkpoint (Version 3; Google, 2018). This checkpoint required the subject to enter the words and/or numbers they were presented with in a unique format (see Figure 7 for an example) that is not easily completed by robots (Mason & Suri, 2012), ensuring that humans were completing the study.

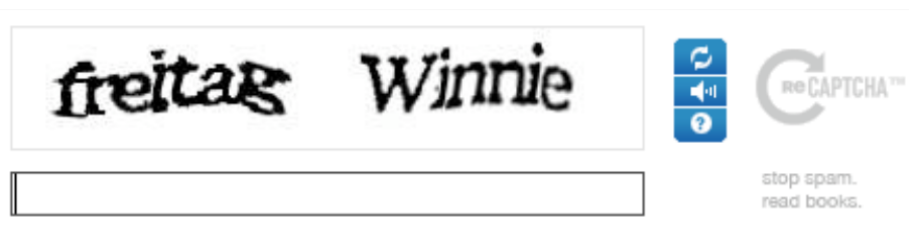


Figure 7. An example of a reCAPTCHA checkpoint at the beginning of the study.

Then both age and military demographics, as well as the social desirability scale (SDS-17) were presented. These were followed by, in randomized order, the WIS-R, M2C-Q, SCC, W-SEQ adapted, PDSS, Combat Experiences, PCL-5, CES-D-10, the AUDIT. Certain demographics were asked again for consistency (e.g., age, rank, length of military service), as

well as novel demographics (e.g., biological sex, gender identity) at the end of the above questionnaires. Attention checks were included throughout the questionnaires to ensure the participant was both following directions and attending to the questionnaire. An example question is “please select ‘true’.” Lengthy questionnaires had one or more manipulation check(s) embedded within the questionnaire (e.g., WIS-R). Due to the length of the study questionnaire and the special sample (Post-9/11 combat Veterans), subjects received \$1.50 for completing the study. The study had been estimated to take up to 40 minutes (i.e., \$0.75 per 30 minutes as recommended by Buhrmester et al., 2011). The decision to reimburse at a slightly higher rate per minutes required for the study completion, compared to what is generally done for 40 minutes, was to be more appealing during the recruitment process given the very specific sample. Buhrmester and colleagues (2011) noted that pay rate does not appear to impact quality of data but may speed up the data collection process. The mean of the current study was 24.90 minutes.

Analyses

The analyses medium is the IBM Statistical Package for the Social Sciences (SPSS version 25). The study statistical significance was set at an alpha level of $p < 0.05$ as discussed in the power analyses section above. Before analyses took place to identify covariates and to evaluate the stated hypotheses, data were first screened for accuracy and an assessment of assumptions took place (e.g., linearity, homoscedasticity).

Summary of Data Screening and Assumptions

This section will discuss results of data cleaning, assumption testing, Pilot study and Full Launch data combination. One component of data cleaning involved manually checking that the participants did indeed meet the criteria of the study, even if they were able to pass through the computerized verifications. The Qualtrics survey was embedded with a human verification

checkpoint and military checkpoints that rejected participants based on a coding system to prevent ineligible participants from partaking in the study. For example, if an individual selected “no” for the question “have you ever been deployed to a combat zone,” they were immediately disqualified from the study by the system. Additionally, the MTurk platform allowed selection of specific demographics so those who likely met the study criteria based on their profile in the MTurk system would be able to view the HIT (e.g., males were able to view the male study). Additional military and attention checkpoints were manually verified. For example, participants were required to select their branch and manually enter their rank. Participants were rejected if the branch did not align with the rank according to branch (e.g., selecting branch to be Army and inputting Seaman for rank). Additionally, military questions (such as about branch and rank) were asked at the beginning of the study and were verified again at the end of the study, with participants disqualified from the study if their responses did not match. This was done to attempt to ensure participants were not lying about their branch, rank, and being a part of the military (i.e., one would not forget which branch they were in or what rank they had).

Military checkpoints assured the individuals were likely being honest and qualified for the study. More specifically, if an individual’s years served, time since separation, and their age did not align, they were also disqualified. For example, if an individual stated they served 20 years, have been removed from the military for 15, and stated they were 28 ... that is not possible. Additionally, years since separation, years served, current age, and the mandatory retirement age were compared based on year. Prior to 2017, the mandatory retirement age was 55 years old. Since 2017, the mandatory retirement age is 62 years old (RAND, 2018). This was considered with the criteria of the study being Post-9/11 combat Veterans, requiring individuals

to have served and deployed during the past 17-year period. For participant descriptives see Participant section on page 40.

Participants who completed some questionnaires in full but skipped one full questionnaire in the study (e.g., not completing the SCC or PDSS), were disqualified. All data was investigated for errors and missing items. The previously discussed oversampling allowed for the conservative decision of disqualification. For the current study, the individuals that made it through the attention and military checkpoints had complete data (i.e., including no missed questions within the questionnaires).

Each of the questionnaires within the survey were recoded as warranted (i.e., reverse scoring items), and a total score was summed for each per the scoring criteria reviewed in the Chapter Two Methods under the Measures section of this document. Each potential covariate, predictor, potential mediator, and criterion variable were assessed for parametric assumptions for each of the hypotheses during analysis, this is discussed in detail in the sections below. There were no significant outliers among the variables, except on the AUDIT. There were two participants who were removed due to their values being more than three standard deviations above the mean identified on the box plot as clear outliers. Outliers for this study were defined as data points that fell outside of three standard deviations of the mean, and 99.7% of the data points are within the 3 standard deviations. Boxplots, histograms, P-P, Q-Q plots, and the skew and kurtosis statistics were also utilized for assessing parametric normality among the stated variables.

I attended to the visual graphs (Q-Q, P-P, Histograms) and the skew and kurtosis statistic for each variable to assess normality. Table 4 below presents the information for each variable. The scores were not significantly skewed and did not have significant kurtosis, based on a skew

and kurtosis cutoff value of ± 1 (Laerd Statistics, 2015). Therefore, no transformations took place.

Table 4.

Skew and Kurtosis of the Variables.

Variable	Skew Statistic	Skew SE	Kurtosis Statistic	Kurtosis SE
SDS	- 0.20	0.10	- 0.58	0.21
WIS-R	0.02	0.10	- 0.63	0.21
M2C-Q	0.25	0.10	- 0.97	0.21
SCC	- 0.25	0.10	- 0.27	0.21
WSEQ	- 0.38	0.10	- 0.60	0.21
PDSS	- 0.30	0.10	- 0.26	0.21
Combat	0.62	0.10	- 0.37	0.21
PCL-5	0.30	0.10	- 0.89	0.21
CESD-10	0.30	0.10	- 0.46	0.21
AUDIT	0.35	0.10	0.01	0.21

Covariate Identification Analyses – Two Steps

The in-depth examination of potential covariates was due to the goal of trying to explain variance above and beyond these more commonly studied variables within the military. by Multiple category groups (income, race, relationship status, branch, and component) were first assessed via 15 separate ANOVAs (Step 1) with the criterion variables being self-concept clarity (SCC), identity fusion (WIS-R), and reintegration difficulties (M2C-Q), to determine if they needed to be included in the regressions described below used to determine covariates for later hypotheses. First, to identify the groups with three or more categories to be included as covariates in the hypotheses testing, 15 ANOVAs were conducted with the three criterion variables reintegration difficulties (M2C-Q), self-concept clarity (SCC), and identity fusion (WIS-R). The demographics with three or more categories were income, race, relationship status, branch, and component. To ensure the groups were balanced for the analyses, recoding occurred. Each variable was recoded as shown in Chapter 3 Results, subsection Identification of Covariates via ANOVAs (Step 1) in Table 7. For each separate ANOVA balance of category numbers was

checked. There were no outliers in the data, as assessed by boxplots. Identity fusion (WIS-R), self-concept clarity (SCC), and reintegration difficulties (M2C-Q) were normally distributed as assessed by Shapiro-Wilks tests ($p > 0.05$) and visual inspection of histograms. Levene's tests for each verified there was homogeneity of variances. The results of the ANOVAs for each of the three criterion variables (WISR, M2CQ, SCC), and what variables will be included in the next step of covariate testing (discussed in the Identification of Covariates via Regressions section) will be provided in the Results of Chapter 3.

Civilian demographic variables (age, biological sex, income, relationship status, race) including military demographic variables (TBI, length of service, length since military separation, branch, component) were assessed to determine if they needed to be included in hypotheses testing as covariates. This was done by dummy coding dichotomous variables and including them with the continuous variables (such as age) in three separate regression described below. Additional variables that have been associated with the criterion variables based on literature reviewed in Chapter One and Chapter Two (SDS-17, DDRI-2, PCL-5, CESD-10, AUDIT, PDSS) were included in the three separate multiple regressions, with the criterion variables being self-concept clarity (SCC), identity fusion (WIS-R), and reintegration difficulties (M2C-Q). These three regressions (Step 2) were conducted to identify significant associations between these variables and the criterion variables, indicating which should be included as a covariate in the hypotheses testing procedures (detailed in results section).

For each of these analyses described here there was linearity and homoscedasticity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. Tolerance values were assessed to verify they were not equal or greater than 0.1, Variance Inflation Factor (VIF) was assessed to verify it was not greater than 10, and

correlations were assessed to verify there were none at or over 0.70 and there was no evidence of multicollinearity. Outliers were assessed via boxplots, there were no values that were greater than three standard deviations above or below the mean. There was independence of residuals, as assessed by a Durbin-Watson statistic with no values greater than 2.05. There were no leverage values that were greater than 0.2 (leverage values less than 0.2 are considered appropriate; Laerd Statistics, 2015), and there were no values for Cook's distance above one. The assumption of normality was met, as evaluated visually via P-P and Q-Q plots as the data points ran snugly along the regression line. For all regressions discussed in the results section, unstandardized beta coefficients were utilized, which are referred to here as *B*.

Pilot Study and Full Launch Datasets Comparison Analyses

The Pilot study and Full Launch data (i.e., group for independent variables) were analyzed with *t*-tests to determine if significant differences existed between the two groups on the study variables (e.g., M2C-Q, SCC, and WIS-R). There were no significant differences between the two groups. Therefore, they were combined for the study analyses as there were no major modifications made to the protocol from the Pilot study. The internal consistency of each of the measures used within the current study were assessed with Cronbach's alpha and were demonstrated in the measures section under methodology.

Hypotheses Testing Analyses

The sequential regression analyses were conducted in SPSS, inputting the appropriate covariates (see Results section) in the first block and the predictor in the second block. This was done to assess the amount of variance explained by the predictor variable when the covariates were held constant. For each of the analyses described here there was linearity and homoscedasticity as assessed by partial regression plots and a plot of studentized residuals

against the predicted values. Tolerance values were assessed to verify they were not equal or greater than 0.1, VIF was assessed to verify it was not greater than 10, and correlations were assessed to verify there were none at or over 0.70 and there was no evidence of multicollinearity. Outliers were assessed via boxplots, there were no values that were greater than three standard deviations above or below the mean. There was independence of residuals, as assessed by a Durbin-Watson statistic with no values greater than 2.09. There were no leverage values that were greater than 0.2 (leverage values less than 0.2 are considered appropriate; Laerd Statistics, 2015), and there were no values for Cook's distance above one. The assumption of normality was met, as evaluated visually via P-P and Q-Q plots as the data points ran snugly along the regression line. The Sequential regression analyses were used to evaluate the following hypotheses:

Hypotheses 1 (greater previous military self-expansion will predict greater reintegration difficulties)

Hypotheses 2 (greater previous military self-expansion will predict greater identity fusion)

Hypotheses 3 (greater identity fusion will predict greater reintegration difficulties)

Hypotheses 5 (greater previous military self-expansion will predict lower self-concept clarity), and

Hypotheses 6 (lower self-concept clarity will predict greater reintegration difficulties).

The mediation analyses described below were conducted with the SPSS extension PROCESS v3.0 created by Andrew F. Hayes (Hayes, 2013). PROCESS is a tool that produces unstandardized model coefficients, standard errors, *t* and *p*-values, as well as confidence intervals using Ordinary Least Squares regression. PROCESS also calculates the indirect, direct,

and total effects within the mediation model using the alpha, beta, c prime, and c paths (Hayes, 2013). Additionally, PROCESS can produce bias-corrected bootstrap confidence intervals, among others, for the effects. The bootstrapping technique was used for the current study, as it does not make assumptions of normality of the indirect effect, is a robust technique, and maintains more power than other common tests such as the Sobel test (MacKinnon, 2015; Preacher & Hayes, 2004).

Two mediation analyses were conducted with the appropriate covariates (see Results section) included based on the prior analyses discussed. The first mediation examined Hypothesis 4 (see Figure 4 below) that identity fusion (WIS-R) would mediate the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q). The total and direct effects were identified as significant or non-significant with both *p*-values and confidence interval testing. The indirect effect was identified with bootstrapping set at 10,000 bootstrap resampling, and utilization of bias-corrected bootstrapping confidence interval testing.

The second mediation was to examine Hypothesis 7 that self-concept clarity (SCC) would mediate the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q; see Figure 5 below). The total and direct effects were identified as significant or non-significant with both *p*-values and confidence interval testing. The indirect effect was identified with bootstrapping set at 10,000 bootstrap resampling, and utilization of bias-corrected bootstrapping confidence interval testing.

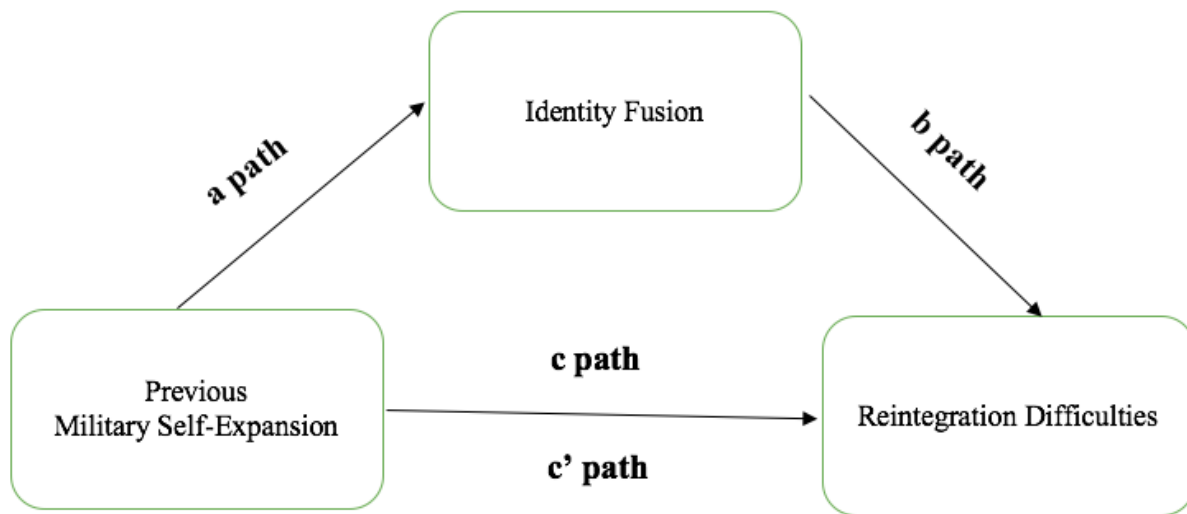


Figure 8. Proposed mediation analysis for Hypothesis 4.

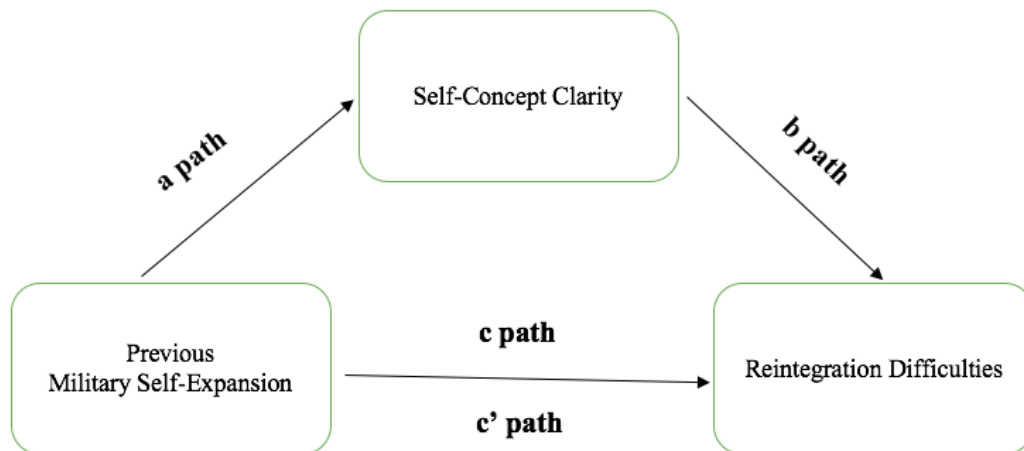


Figure 9. Proposed mediation analyses for Hypothesis 7.

CHAPTER III

RESULTS

Summary of Analyses to Combine Full Launch and Pilot Studies

There were 519 Full Launch subjects and 15 Pilot study subjects included in each of the following *t*-tests described here (see Table 5 for *t*-tests and Table 6 for descriptives of variables for the combined sample). The predictor, mediators, potential covariates, and criterion variables were assessed for significant differences between the two studies. The Levene's test verified there was homogeneity of variances for each of the *t*-tests (all *ps* > 0.05).

Although the Levene's test indicated that there was sufficient homogeneity, given the unequal sample sizes a non-parametric Mann Whitney's *U* *t*-test was also conducted to evaluate if there were significant differences between the two studies. The results also indicated that there were no significant differences between the two groups (all *ps* > 0.05) and the Full Launch and Pilot groups could be combined.

Table 5.

Means, standard deviations, and t-test results comparing the Pilot study and Full Launch data

Variable	Pilot <i>M</i>	Pilot <i>SD</i>	Full <i>M</i>	Full <i>SD</i>	<i>df</i>	<i>t</i> -statistic	<i>p</i> value
SDS	8.27	3.26	8.47	3.84	15.14	- 0.24	0.81
WIS-R	60.80	12.57	61.74	13.38	14.93	- 0.28	0.77
M2C-Q	13.87	14.52	19.42	14.51	14.82	- 1.46	0.16
SCC	31.40	7.45	33.84	10.30	15.58	- 1.23	0.23
WSEQ	66.72	16.49	68.27	15.10	14.68	- 0.35	0.72
PDSS	37.53	7.46	37.24	8.23	15.00	0.14	0.88
Combat	34.93	19.18	40.96	18.27	14.74	- 1.20	0.24
PCL-5	34.93	17.40	27.69	20.42	15.13	1.58	0.13
CESD-10	8.53	4.47	10.69	6.13	15.56	- 1.82	0.08
AUDIT	6.13	6.03	6.05	4.59	14.47	0.04	0.96

Table 6.

Combined Total Study Variables Descriptives

Variable	<i>M</i>	<i>SD</i>	Mode	Min	Max
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SDS	8.47	3.82	9	0	16
WIS-R	61.70	13.30	70	31	94
M2C-Q	19.27	14.53	0	0	62
SCC	33.77	10.23	36.	12	59
WSEQ	68.22	15.13	91	23	91
PDSS	37.25	8.20	50	12	50
DDRI-2	40.79	18.30	20	17	95
PCL-5	27.90	20.36	0	0	80
CESD-10	10.63	6.10	6	0	28
AUDIT	5.03	4.74	0	0	19

Identification of Covariates via ANOVAs (Step 1)

The groups with multiple categories described here did not have “true” missing data points. Rather, certain items (e.g., prefer not to disclose for income) were recoded as missing when the group was too small in numbers to be included in the ANOVA. Income was recoded to allow for equal groups for the analyses, as four groups had a small amount of endorsements compared to others. Eight individuals selected “prefer not to disclose” for income, these were recoded as missing. The 21 who selected having income under \$10,000, the 54 that selected having income between \$10,000 and \$20,000, and the 132 that endorsed having incoming between \$20,000 and \$40,000, were recoded as below \$40,000. The 37 that selected having income between \$81,000 and \$100,000, as well as the 25 that selected having income over \$100,000, were recoded as \$81,000 and above. The recordings for income were due to the small number of endorsements for the initial income categories within those ranges. There were 155 participants who reported income between \$41,000 and \$60,000 and 102 participants who reported income between \$61,000 and \$80,000. These data were not recoded as the sample sizes

were reasonable. Thus, we attempted to retain the original categories of the questionnaire for comparisons while collapsing across categories when needed due to small sample sizes.

For Race, there was an option for Multi Race to be selected; however, individuals typed in responses such as “NA, none, not applicable” or typed in one of the races they had previously selected such as “White” or “Hispanic,” with no multiple races endorsed in the Multi Race fill in the blank (e.g., biracial black and white, all identifying with one race over another). Other individuals put in responses such as “human solidier” or “you do not need to know.” As such, during the recoding, responses that did not identify with two or more racial categories, were recoded as the one race they identified with previously in the multiple-choice options (as the typed in race was consistent with their selected race). If they gave responses such as “NA,” and did not select a race from the multiple-choice options, they were recoded as missing. As seen in the table below, Multi Race had 222 responses across a total of 738 Race identifications (recall that some participants identified more than one category). For the 222 Multi Race selections, 204 responses identified at least one race (e.g., previously selected African American from multiple-choice, and then entered African American again in the Multi Race option). When this occurred, the typed in duplicate response was disregarded. The remaining 18 Multi Race identifications were blank responses, a typed in response such as “NA,” or an ambiguous response such as “human solidier.”

Those who typed in their already selected race were coded as their already selected their identified race. To allow for balanced groups for race, the major groups were kept, and all others were recoded into Other (see Table 7). This was done based on previous studies recoding in this manner to identify the major groups (National Center for Veterans Analysis and Statistics, 2016; African American, White, Hispanic, Other).

Regarding relationship status, separated, remarried, and widowed were recoded due to grouping sizes. Widowed was recoded into legally single, remarried was recoded into married, and separated was recoded into divorced. For the branch variable, Coast Guard was recoded into missing for the analyses due to such a small number compared to the other branches. The major components of the military were retained; however, active guard/reserves category was recoded into missing due to the small number. The recoded groups were utilized for the 15 ANOVAs.

Table 7

Recoding information for income, race, relationship status, branch, and component

Variables		Original n	Recoded
Income	Under 10k	21	Recoded as Below 40k
	10-20k	54	Recoded as Below 40k
	21-40k	132	Recoded as Below 40k
	Below 40k	NA	207
	41-60k	155	155
	61-80k	102	102
	Over 81k	NA	62
	81-100k	37	Recoded as Over 81k
	Over 100k	25	Recoded as Over 81k
	Prefer to not disclose	8	Recoded as Over 81k
	Missing	NA	8
	Total #	534	534
Race	Black	61	61
	White	390	390
	Hispanic	34	34
	Asian	16	Recoded as Other
	Native Hawaiian/Other Pacific Islander	6	Recoded as Other
	Native American/American Indian	5	Recoded as Other
	Other	4	Recoded as Other
	Multi Race	222	Recoded as Other
	Recoded Other		31
	Missing	NA	18
	Total #	738	534
Relationship Status	Legally Single	168	172
	Married	257	258
	Divorced	42	56
	Separated	14	Recoded as Divorced
	Remarried	1	Recoded as Married
	Widowed	4	Recoded as Legally Single
	Living with a significant other	48	48
	Total #	534	534
Branch	Air Force	70	70

	Army	338	338
	Marine Corps	47	47
	Navy	68	68
	Coast Guard	11	Recoded as Missing
	Missing	NA	11
	Total #	534	534
Component	Active FT	403	403
	Active PT	26	26
	Reserves	61	61
	National Guard	40	40
	Active Guard/Reserves	4	Recoded as Missing
	Missing	NA	4
	Total #	534	534

Note: Bolded labels indicate category retained after the recoding was complete. Racial categories total n added up to more than the total n of the study because some participants identified as Multi Race (see paragraph above table for details).

ANOVAs evaluating differences in military components.

Three one-way ANOVAs were run with military components (active full-time, active part-time, reserves, national guard) as the predictor variable, and three dependent variables: reintegration difficulties (M2C-Q), self-concept clarity (SCC), and identity fusion (WIS-R) to determine which categories of components need to be included as covariates for the next step of covariate testing. There was a statistically significant difference between military components for identity fusion (WISR), ($F(3,526) = 2.94, p < 0.05$). While military components for both reintegration difficulties (M2CQ), ($F(3,526) = 0.96, p = 0.40$), and for self-concept clarity (SCC), ($F(3,526) = 0.83, p = 0.83$), were not statistically significant. Tukey HSD post hoc paired comparisons were conducted to investigate the differences between the components for the identity fusion (WISR) variable. Identity fusion (WISR) score for the active full-time component ($M = 61.28, SD = 13.28$) was significantly greater than the active part-time component ($M = 69.15, SD = 13.11$), by a mean score of 7.87. 95% CI [0.99, 14.76], which was statistically significant at $p < 0.05$. The two components, Active Full-Time and Active Part-Time, will be included with the dichotomous and continuous variables that will be included in the hypotheses

testing that includes identity fusion as a mediator (Hypothesis 4) and as a criterion variable (Hypotheses 2).

ANOVAs evaluating differences in income.

Three one-way ANOVAs were run with income as the predictor variable, and three dependent variables: reintegration difficulties (M2C-Q), self-concept clarity (SCC), and identity fusion (WIS-R) to determine which categories of income need to be included as covariates for the hypotheses testing. There was not a statistically significant difference between income categories for identify fusion (WISR), ($F(3, 522) = 0.20, p = 0.89$), and reintegration difficulties (M2CQ), ($F(3,522) = 2.48, p = 0.06$). There was a statistically significant difference found between income categories for the self-concept clarity (SCC) criterion, ($F(3,522) = 3.21, p < 0.05$). Tukey post hoc analyses revealed the self-concept clarity score for the under \$40,000 group ($M = 34.21; SD = 9.82$) was greater compared to the over \$81,000 group ($M = 30.31; SD = 11.20$), a mean difference of 3.90, 95% *CI* [0.13, 7.68] which was statistically significant at $p < 0.05$. Self-concept clarity score for the \$60,000 to \$80,000 group ($M = 35.17; SD = 9.67$) was also greater compared to the over \$81,000 group ($M = 30.31; SD = 11.20$), with a mean difference of 4.86, 95% *CI* [0.66, 9.06] which was statistically significant at $p < 0.05$. As such, the income categories of under \$40,000, \$60,000 to \$80,000, and over \$81,000, will be included in the regression analysis identifying covariates for self-concept clarity. These variables here will be included with the dichotomous and continuous variables that will be included to identify which of the variables will be included in the hypotheses testing that includes self-concept clarity as a mediator (Hypothesis 7) and a criterion variable (Hypothesis 5).

ANOVAs evaluating differences in race.

Three one-way ANOVAs were run with race the predictor variable, and three dependent variables: reintegration difficulties (M2C-Q), self-concept clarity (SCC), and identity fusion (WIS-R) to determine which categories of race need to be included as covariates for the hypotheses testing. There was not a statistically significant difference between racial categories for identify fusion (WISR), ($F(3, 512) = 0.80, p = 0.49$), and self-concept clarity (SCC), ($F(3, 512) = 0.08, p = 0.96$). There was a statistically significant difference found between racial categories for reintegration difficulties (M2CQ), ($F(3,512) = 3.88, p = 0.06$). Tukey post hoc analyses revealed the reintegration difficulties score for the Hispanic group ($M = 24.88; SD = 14.48$) was greater compared to the Other racial group ($M = 12.74; SD = 13.22$), a mean difference of 12.14, 95% *CI* [2.90, 21.38] which was statistically significant at $p < 0.05$. The Hispanic and Other racial categories will be included with the dichotomous and continuous variables that will be included in the regressions for Step 2 to identify which of the variables will be included in the hypotheses testing with reintegration difficulties as a criterion variable (Hypotheses 1, 3, 4, 6, and 7).

ANOVAs evaluating differences in relationship status.

Three one-way ANOVAs were run with relationship status as the predictor variable, and three dependent variables: reintegration difficulties (M2C-Q), self-concept clarity (SCC), and identity fusion (WIS-R) to determine which categories of relationship status need to be included as covariates for the hypotheses testing. There was a statistically significant difference between relationship status categories for identify fusion (WISR), ($F(3, 530) = 7.11, p < 0.05$). There was not a statistically significant different in relationship status categories for self-concept clarity (SCC), ($F(3, 530) = 2.35, p = 0.07$) and reintegration difficulties (M2CQ), ($F(3,530) = 2.22, p = 0.08$). Tukey post hoc analyses revealed the identity fusion (WISR) score for the legally single

category ($M = 65.43$; $SD = 13.03$) was greater compared to the married/remarried category ($M = 59.59$; $SD = 13.12$), a mean difference of 5.84, 95% CI [2.53, 9.16] which was statistically significant at $p < 0.05$. The Legally Single and Married/Remarried groups will be included with the dichotomous and continuous variables to identify which of the variables will be included in the hypotheses testing with identity fusion as a mediator (Hypothesis 4) or as a criterion variable (Hypotheses 2).

ANOVAs evaluating differences in military branch.

Three one-way ANOVAs were run with military branch as the predictor variable, and three dependent variables: reintegration difficulties (M2C-Q), self-concept clarity (SCC), and identity fusion (WIS-R) to determine which categories of military branch need to be included as covariates for the hypotheses testing. There was a statistically significant difference between branch categories for identify fusion (WISR), ($F(3, 519) = 4.76$ $p < 0.05$). There was not a significant difference found between branches for self-concept clarity (SCC), ($F(3, 519) = 2.61$, $p = 0.05$) and reintegration difficulties (M2CQ), ($F(3,519) = 2.49$, $p = 0.05$). Tukey post hoc analyses revealed the identify fusion (WISR) score for Army ($M = 24.88$; $SD = 14.48$) was greater compared to Marines ($M = 12.74$; $SD = 13.22$), a mean difference of 7.20, 95% CI [1.91, 15.51] which was statistically significant at $p < 0.05$. Thus, Army and Marine branches will be included with the dichotomous and continuous variables included to identify which of the variables will be covariates in the hypotheses testing that includes identity fusion as a mediator (Hypothesis 4) and as a criterion variable (Hypotheses 2).

Identification of Covariates via Multiple Regression (Step 2)

This section outlines three multiple regressions run with variables that have shown to be associated with each criterion as reviewed in Chapter One and Chapter Two, as well as the

variables identified by the previous ANOVAs. These regressions were run to determine which variables would need to be included in hypothesis-testing analyses. The variables included will be provided, as well as the results of the regressions which show which variables will be included as covariate(s) for hypothesis testing.

Multiple regression evaluating potential covariates for identity fusion (WISR).

A multiple regression analysis was conducted to evaluate which variables should be included as covariates for hypothesis testing with identity fusion (WIS-R) as the criterion variable. The predictors included were the following variables that were discussed in Chapter Two: Combat (DDRI-2) and Socially Desirable Responding (SDS-17). The following demographic variables was included: Biological Sex (dummy code 0 = male, 1 = female), length of service, length since military separation, longest deployment, and length since last deployment. These demographic variables were included based on the literature review findings in Chapter One and Chapter Two. Lastly, based on the ANOVA covariate identification analyses the following will be included to verify they remain significant when included with other potential covariates: legally single (dummy coded 0 = all other groups, 1 = legally single), married/remarried (dummy coded 0 = all other groups, 1 = married/remarried), Army (dummy coded 0 = all other groups, 1 = Army), Marine (dummy coded 0 = all other groups, 1 = Marine), active full-time (dummy coded 0 = all other groups, 1 = active full-time), and active part-time (dummy coded = all other groups, 1 = active part-time).

The linear combination of the variables were significantly related to identity fusion (WIS-R), ($F(11,511) = 8.321, p < 0.05$), with an R squared of 0.15, with the predictors explaining 13% (Adjusted R Square) of identity fusion for the overall model, a medium effect size (Field, 2009). Five variables, SDS-17, length of service, length since military separation, legally single, and

Marine branch, significantly predicted WIS-R. Regression coefficients, standard errors, and *t-values* can be found in Table 8 below. The five significant predictors will be included in hypotheses testing in which identity fusion (WIS-R) is a mediator (Hypothesis 4) or a criterion variable (Hypothesis 2).

Table 8.

Summary of the WIS-R multiple regression analysis for covariate identification.

Variable	<i>B</i>	<i>SE_B</i>	<i>t-value</i>	<i>p-value</i>
Intercept	68.04*	4.06	16.74	0.001
SDS-17	-0.67*	0.14	-4.73	0.001
DDRI-2	0.05	0.03	1.69	0.090
Biological Sex	0.59	1.11	0.52	0.528
Length of service	-0.48*	0.10	-4.53	0.001
Length since military separation	-0.59*	0.24	-2.45	0.014
Longest Deployment	0.03	0.24	0.13	0.894
Length since last deployment	0.20	0.24	0.84	0.401
Legally single	3.88*	1.60	2.42	0.015
Married/remarried	-0.96	1.49	-0.64	0.518
Army	1.03	1.31	0.78	0.43
Marine	-6.32*	2.14	-2.93	0.004

Note: *significant at $p < 0.05$; *B* = unstandardized regression coefficient; *SE_B* = standard error of the coefficient

Multiple regression evaluating potential covariates for self-concept clarity (SCC).

A multiple regression analysis was conducted to evaluate which variables should be included as covariates for hypothesis testing involving self-concept clarity (SCC) as a mediator and as a covariate. The predictors included were the following variables that were discussed in Chapter Two: socially desirable responding (SDS-17) and the following demographic variables were included based on the literature review findings in Chapter One: Age, Biological Sex (dummy code 0 = male, 1 = female), length of service, length since military separation, longest deployment, and length of time since last deployment. Lastly, based on the ANOVA covariate identification analyses the following will be included to verify they remain significant when included with other potential covariates: income under \$40,000 (dummy coded 0 = all other groups, 1 = under \$40k), income between \$60,000 and \$80,000 (dummy coded 0 = all other

groups, 1 = \$60-80k), and income over \$81,000 (dummy coded 0 = all other groups, 1 = Over 80k).

The linear combination of the variables significantly related to self-concept clarity (SCC), ($F(10, 523) = 4.083, p < 0.05$), with an R squared of 0.07, with the predictors explaining 5% (Adjusted R Square) of self-concept clarity (SCC) for the overall model, a small effect size (Field, 2009). The results of the regression indicated that four variables, SDS-17, biological sex, length of military service, and income over \$81,000 significantly predicted self-concept clarity (SCC). Regression coefficients, standard errors, and t-values can be found in Table 9 below. The four variables will be included in hypotheses testing in which self-concept clarity (SCC) is mediator (Hypothesis 7) or criterion variable (Hypothesis 5).

Table 9

Summary of the SCC multiple regression analysis for covariate identification.

Variable	B	SE _B	t-value	p-value
Intercept	40.27*	3.54	11.36	0.001
SDS-17	-0.43*	0.11	-3.83	0.001
Age	0.03	0.08	0.43	0.666
Biological sex	-1.85*	0.88	-2.09	0.037
Length of Service	-0.23*	0.11	-2.04	0.041
Length since Military Separation	-0.30	0.20	-1.53	0.125
Longest Deployment	0.15	0.18	0.81	0.417
Length Since Last Deployment	0.04	0.19	0.25	0.802
Under 40k	-0.97	1.05	-0.92	0.356
60-80k	1.51	1.17	1.29	0.197
Over 81k	-4.32*	2.10	-2.05	0.041

Note: *significant at $p < 0.05$; B = unstandardized regression coefficient; SE_B = standard error of the coefficient

Multiple regression evaluating potential covariates for reintegration difficulties (M2CQ).

A multiple regression analysis was conducted to evaluate which variables should be included as covariates for hypothesis testing involving reintegration difficulties (M2C-Q) as the criterion variable. The predictors included were the following variables that were discussed in

Chapter One and Two: socially desirable responding (SDS-17), Combat (DDRI-2), PTSD (PCL-5), Depression (CESD), Alcohol abuse (AUDIT), and Social Support (PDSS). The following demographic variables were included based on the literature review in Chapter One: Age, Biological Sex (dummy code 0 = male, 1 = female), TBI endorsement (No = 0, Yes = 1), length of service, length of military separation, longest deployment, and length since last deployment. Lastly, based on the ANOVA covariate identification analyses the following will be included to verify they remain significant when included with other potential covariates: Hispanic and Other racial categories

The linear combination of the variables significantly related to reintegration difficulties (M2C-Q; $F(15, 500) = 38.32, p < 0.05$), with an R square of 0.53, with the predictors explaining 52% (Adjusted R Square) of M2C-Q for the overall model, a large size effect (Field, 2009). The results of the regression indicated that six variables, SDS-17, Combat, PCL-5, CESD-10, PDSS, and Other racial category significantly predicted reintegration difficulties (M2C-Q). Regression coefficients, standard errors, and *t-values* can be found in Table 10 below. The six significant predictors will be included as covariates in the hypotheses testing when reintegration difficulties (M2C-Q) is the criterion variable (Hypotheses 1, 3, 4, 6, and 7).

Table 10
Summary of the M2C-Q multiple regression analysis for covariate identification.

Variable	<i>B</i>	<i>SE_B</i>	<i>t-value</i>	<i>p-value</i>
Intercept	21.20*	4.38	4.83	0.001
SDS-17	-0.62*	0.11	-5.23	0.001
DDRI-2	0.09*	0.02	3.15	0.002
PCL-5	0.33*	0.02	12.87	0.001
CESD-10	0.24*	0.08	2.91	0.003
AUDIT	0.18	0.10	1.85	0.064
PDSS	-0.41*	0.05	-7.22	0.001
Age	0.10	0.08	1.23	0.219
Biological Sex	0.01	0.94	0.01	0.998
TBI	2.56	2.25	1.13	0.258
Hispanic	2.45	1.82	1.34	0.178
Other	-3.97*	1.89	-2.09	0.037
Length of Service	-0.13	0.11	-1.19	0.234

Length of Military Separation	-0.19	0.20	-0.93	0.348
Longest Deployment	0.04	0.19	0.22	0.82
Length Since Last Deployment	0.01	0.20	0.04	0.96

Note: *significant at $p < 0.05$; B = unstandardized regression coefficient; SE_B = standard error of the coefficient

Summary of Hypotheses Testing

The results that follow were the planned analyses for hypotheses testing. A strength of the current study was a relatively equal biological sex representation of the sample, as such exploratory analyses on potential biological sex differences was conducted and can be found in the exploratory analyses in Appendix U. The findings of the planned analyses will be discussed in the Discussion section.

For reference, Table 11 provides correlations for all hypotheses testing in this section.

Table 11

Correlation table of the continuous variables included in the seven hypotheses.

	WISR	M2CQ	SCC	WSEQ	SDS17	PDSS	DDRI2	PCL5	CESD10	AUDIT	Age Q #2	Length of Service	Length Military Separation
WISR	1												
M2CQ	.29*	1											
SCC	.12*	.49*	1										
WSEQ	-.54*	-.26*	-.22*	1									
SDS17	-.15*	-.19*	-.15*	.14*	1								
PDSS	-.36*	-.42*	-.29*	.43*	.10*	1							
DDRI2	.10*	.34*	.12*	-.14*	.12*	-.09*	1						
PCL5	.12*	.63*	.38*	-.10*	-0.02	-.24*	.41*	1					
CESD10	.15*	.34*	.20*	-.12*	-0.03	-.22*	.12*	.32*	1				
AUDIT	.10*	.17*	0.05	-.14*	-.09*	-.10*	0.03	.10*	.24*	1			
Age	-.16*	-.12*	-.10*	.11*	-0.01	.16*	-.10*	-.12*	-.08*	-0.03	1		
Length of Service	-.21*	-.13*	-.11*	.16*	0	.17*	-0.02	-.12*	-0.05	-0.01	.61*	1	
Length Military Separation	-.15*	-.11*	-.10*	.15*	-0.07	0.06	-.22*	-.11*	-0.06	0.01	.46*	0.02	1

Note: *significance at the $p < 0.05$ level

Hypothesis 1: A sequential multiple regression analysis was run to test if greater previous military self-expansion (WSEQ) significantly predicted greater reintegration difficulty (M2C-Q). The initial model (Model 1), included covariates SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, and Other racial group, was statistically significant ($F(6, 509) = 94.49, p < 0.05$), with predictors explaining 52% (Adjusted R square = 0.52) of reintegration difficulties (M2C-Q), a large effect size (Field, 2009). The full model (Model 2) was Model 1 (all covariates held constant) plus WSEQ and was statistically significant ($F(7, 508) = 81.74, p < 0.05$), with the predictors explaining 53% (Adjusted R square = 0.52) of reintegration difficulties (M2C-Q), a large effect size (Field, 2009). When previous military self-expansion (WSEQ) was added to the model (in Model 2) it did not add statistically significantly increase the R squared from Model 1; increase was 0.003, ($F(1, 508) = 3.02, p = 0.08$). See Table 12 for full details on each regression model.

Table 12

Sequential Multiple Regression Predicting M2C-Q from SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, Other racial group, and WSEQ.

	<i>Model 1</i>				<i>Model 2</i>			
Variable	B	SE_B	t-value	p-value	B	SE_B	t-value	p-value
Constant	24.69*	2.75	8.97	0.001	26.99*	3.04	8.85	0.001
SDS-17	-0.62*	0.11	-5.32	0.001	-0.59*	0.11	-5.06	0.001
DDRI-2	0.09*	0.02	3.65	0.001	0.09*	0.02	3.34	0.001
PCL-5	0.348*	0.02	13.59	0.001	0.35*	0.02	13.70	0.001
CESD-10	0.25*	0.07	3.28	0.001	0.25*	0.07	3.22	0.001
PDSS	-0.43*	0.05	-7.65	0.001	-0.39*	0.06	-6.26	0.001
Other	-4.42*	1.87	-2.35	0.019	-4.48*	1.87	-2.39	0.017
WSEQ					-0.05	0.03	-1.73	0.083
R^2	0.52				0.53			
F	94.49*				81.74*			
ΔR^2	0.52				0.003			
ΔF	94.49*				3.02			

Note: *significant at $p < 0.05$; B = unstandardized regression coefficient; SE_B = standard error of the coefficient.

Hypothesis 2: A sequential multiple regression analysis was used to evaluate if Veterans who reported greater previous military self-expansion (W-SEQ) would report greater identity fusion (WIS-R). The initial model (Model 1) included covariates SDS-17, length of service, length since military separation, legally single relationship status, and Marine branch, was statistically significant ($F(5, 517) = 17.16$, $p < 0.05$), with predictors explaining 14% (adjusted R square = 0.13) of identity fusion (WIS-R), a small to medium effect size (Field, 2009). The full model (Model 2) was Model 1 (all covariates held constant) plus WSEQ, and was statistically significant ($F(6, 516) = 45.62$, $p < 0.05$), with all of the predictors explaining 34% (Adjusted R Square = 0.33) of identity fusion (WIS-R), a medium effect size (Field, 2009). When previous military self-expansion (WSEQ) was added to the model (in Model 2) it added a statistically significant increase in R square of 0.20 (medium effect; Field, 2009) from Model 1, ($F(1, 516) = 161.29$, $p < 0.05$) from Model 1. See Table 13 for full details on each regression model.

Table 13

Sequential Multiple Regression Predicting WIS-R from SDS-17, length of service, length since military separation, legally single, Marine, and WSEQ.

	<i>Model 1</i>			<i>Model 2</i>		
Variable	B	SE_B	p-value	B	SE_B	p-value
Constant	71.95*	1.78	0.001	96.66*	2.49	0.001
SDS-17	-0.64*	0.14	0.001	-0.35*	0.12	0.005
Length of Service	-0.48*	0.10	0.001	-0.32*	0.09	0.001
Length since Military Separation	-0.46*	0.13	0.001	-0.24*	0.12	0.040
Marine	-6.74*	1.90	0.001	-5.80*	1.66	0.001
Legally single	4.71*	1.18	0.001	2.69*	1.04	0.011
WSEQ				-0.42*	0.03	0.001
<i>R</i> ²	0.14			0.34		
<i>F</i>	17.16*			45.62*		
ΔR^2	0.14			0.20		
ΔF	17.16*			161.29*		

Note: *significant at $p < 0.05$; B = unstandardized regression coefficient; SE_B = standard error of the coefficient.

Hypothesis 3: A sequential multiple regression analysis was used to evaluate if Veterans who endorse greater identity fusion would endorse greater reintegration difficulties. The initial model (Model 1) included predictors SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, and Other racial category, was statistically significant ($F(6, 509) = 94.49, p < 0.05$), with predictors explaining 52% (Adjusted R square = 0.52) of reintegration difficulties (M2C-Q), a large effect size (Field, 2009). The full model (Model 2) was Model 1 (all covariates held constant) plus WIS-R and was statically significant ($F(7, 508) = 83.76, p < 0.05$), with predictors explaining 53% (Adjusted R square = 0.52) of reintegration difficulties, a large effect size (Field, 2009). When identity fusion (WIS-R) was added to the model (Model 2) it added a statistically significant increase in R square of 0.01 from Model 1, ($F(1, 508) = 9.07, p < 0.05$). See Table 14 for full details on each regression model.

Table 14

Sequential Multiple Regression Predicting M2CQ from SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, Other racial category, and WIS-R.

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE_B</i>	<i>p-value</i>	<i>B</i>	<i>SE_B</i>	<i>p-value</i>
Constant	24.69*	2.75	0.001	15.42*	4.03	0.001
SDS-17	-0.62*	0.11	0.001	-0.57*	0.11	0.001
DDRI-2	0.09*	0.02	0.001	0.09*	0.02	0.001
PCL-5	0.34*	0.02	0.001	0.34*	0.02	0.001
CESD-10	0.25*	0.07	0.001	0.24*	0.07	0.002
PDSS	-0.43*	0.05	0.001	-0.37*	0.06	0.001
Other	-4.42*	1.87	0.019	-4.15*	1.86	0.026
WISR				0.11*	0.03	0.002
<i>R</i> ²	0.52			0.53		
<i>F</i>	94.49*			83.76*		
ΔR^2	0.52			0.01		
ΔF	94.49*			9.70*		

Note: *significant at $p < 0.05$; *B* = unstandardized regression coefficient; *SE_B* = standard error of the coefficient.

Hypothesis 4: The PROCESS extension in SPSS was used to evaluate if identity fusion (WIS-R) mediated the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q). Analysis for Hypothesis 1 indicated that there was no

significant relationship between military self-expansion and reintegration difficulties; however, the mediation analysis was still conducted for completeness as it was in line with the analytical plan, and to gain understanding about the other paths of the mediation model.

The overall model summary indicated that the predictor previous military self-expansion, potential mediator identity fusion, and the covariates social desirability (SDS-17), combat (DDRI-2), post-traumatic stress disorder symptoms (PCL-5), depression symptoms (CESD-10), post-deployment social support (PDSS), Other racial category, length of service, length since military separation, Marine branch, and legally single relationship status, accounted for 52% of the total variance ($R^2 = 0.52$; a large effect size according to Field (2009), ($F(12, 495) = 48.29, p < 0.05$) for reintegration difficulties.

The results of the analysis indicated the c path (path between previous military self-expansion and reintegration difficulties; WESQ; $B = -0.04, p = 0.20$), and was not significant. The a path was the predictive association between previous military self-expansion and identity fusion (WESQ; $B = -0.36, p < 0.05$) and was significant. The b path identity fusion (WIS-R; $B = 0.09, p < 0.05$) remained a significant predictor of reintegration difficulties with the c' path previous military self-expansion ($B = -0.01, p = 0.78$) included in the model, while the c' path was no longer significant. See Table 15 for full details of the analysis. The bias-corrected bootstrap confidence intervals indicated that identity fusion (WIS-R) did not mediate the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q). As such, there was not a statistically significant indirect effect ($a*b$) of previous military self-expansion (W-SEQ) on reintegration difficulties (M2C-Q) through identity fusion (WIS-R), $ab = -0.03, BC\ CI [-0.0716, 0.000]$. See Figure 11 below for a visual representation of the mediation analysis. The completely standardized indirect effect of previous military self-

expansion (WSEQ) on reintegration difficulties (M2C-Q) was -0.03, with bootstrapping *SE* of 0.01, and a *BC CI* [-0.738, 0.000] was also not significant.

Table 15

PROCESS extension predicting M2CQ from SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, Other racial category, length of service, length since military separation, Marine branch, legally single, WIS-R, and W-SEQ.

Variable	<i>B</i>	<i>SE_B</i>	<i>p-value</i>
Constant	18.64*	5.24	0.001
SDS-17	-0.59*	0.12	0.001
DDRI-2	0.09*	0.02	0.001
PCL-5	0.34*	0.02	0.001
CESD-10	0.24*	0.07	0.002
PDSS	-0.37*	0.06	0.001
Other	-4.27*	1.88	0.023
Length of Service	0.01	0.08	0.902
Length since Military Separation	-0.08	0.11	0.474
Legally Single	-0.06	0.99	0.948
Marine Branch	-3.64*	1.59	0.022
WSEQ	-0.01	0.03	0.780
WIS-R	0.09*	0.04	0.030

Note: *significant at $p < 0.05$; *B* = unstandardized regression coefficient; *SE_B* = standard error of the coefficient.

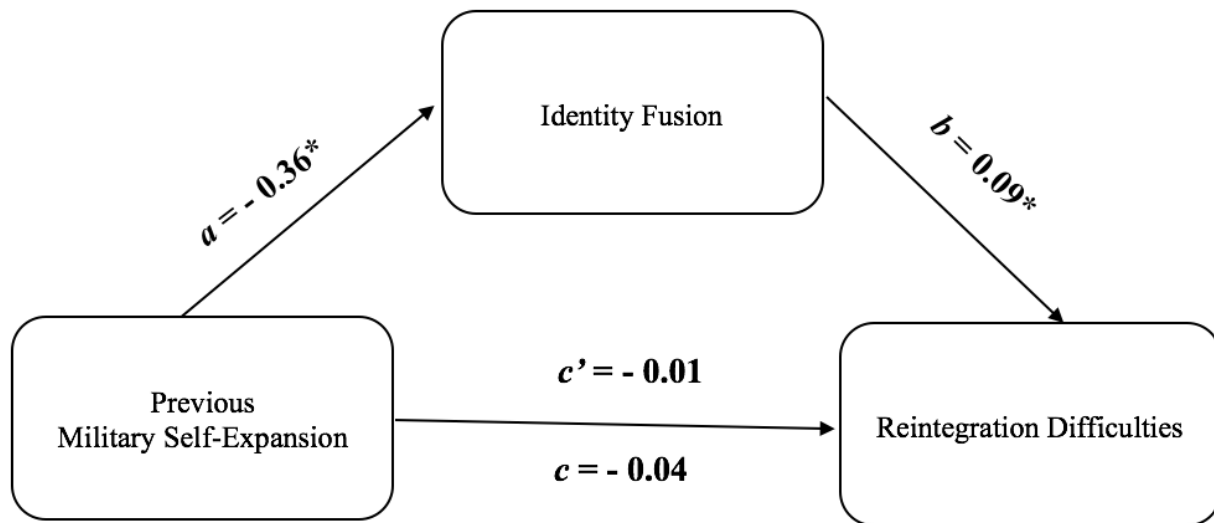


Figure 10. Visual representation of the mediation analysis with identity fusion (Hypothesis 4).

*significant at the $p < 0.05$ level

Hypothesis 5: A sequential multiple regression analysis was used to test if greater previous military self-expansion (W-SEQ) significantly predicted lower self-concept clarity (SCC). The initial model (Model 1) included predictors SDS-17, biological sex, length of service, and income over \$81,000, was statistically significant ($F(34, 529) = 7.60, p < 0.05$), with predictors explaining 5% (Adjusted R square = 0.04) of self-concept clarity (SCC), a small effect size (Field, 2009). The full model (Model 2) was Model 1 (all covariates held constant), plus W-SEQ was statistically significant ($F(5, 528) = 10.61, p < 0.05$), with the predictors explaining 9% (Adjusted R square = 0.08) of self-concept clarity, a small effect size (Field, 2009). When previous military self-expansion (W-SEQ) was added to the model (in Model 2) it added a statistically significant increase in R square of 0.03 from Model 1, ($F(1, 528) = 21.49, p < 0.05$). See Table 16 for full details on each regression model.

Table 16

Sequential Multiple Regression Predicting SCC from SDS-17, length of service, length since military separation, income over 81k, and WSEQ.

Variable	Model 1			Model 2		
	B	SE _B	p-value	B	SE _B	p-value
Constant	41.52*	1.75	0.001	49.89*	2.49	0.001
SDS-17	-0.40*	0.11	0.001	-0.32*	0.11	0.004
Biological Sex	-1.80	0.87	0.040	-2.03	0.86	0.018
Length of Service	-0.18*	0.08	0.028	-0.11	0.08	0.158
Over 81k	-4.70*	2.06	0.023	-4.69	2.02	0.021
WSEQ				-0.13*	0.02	0.001
R^2	0.05			0.09		
F	7.60*			10.61*		
ΔR^2	0.05			0.03		
ΔF	7.60*			21.49*		

Note: *significant at $p < 0.05$; B = unstandardized regression coefficient; SE_B = standard error of the coefficient.

Hypothesis 6: A sequential multiple regression analysis was used to test if lower self-concept clarity would be a significant predictor of greater reintegration difficulties. The initial model (Model 1) included covariates SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, and Other

racial category, was statistically significant ($F(6, 509) = 94.49, p < 0.05$), with the predictors explaining 52% of the variance (Adjusted R square = 0.52) of reintegration difficulties (M2C-Q), a large effect size (Field, 2009). The full model (Model 2) was Model 1 (all covariates held constant) plus SCC was statistically significant ($F(7, 508) = 93.21, p < 0.05$), with the predictors explaining 56% (Adjusted R square of 0.55) of reintegration difficulties, a large effect size (Field, 2009). When self-concept clarity (SCC) was added to the model (in Model 2) it added a statistically significant increase in R square of 0.03 from Model 1, ($F(1, 508) = 41.01, p < 0.05$). See Table 17 for full details on each regression model.

Table 17

Sequential Multiple Regression Predicting M2C-Q from SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, Other racial category, and SCC.

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE_B</i>	<i>p-value</i>	<i>B</i>	<i>SE_B</i>	<i>p-value</i>
Constant	24.69*	2.75	0.001	12.20*	3.29	0.001
SDS-17	-0.62*	0.11	0.001	-0.52*	0.11	0.001
DDR-2	0.09*	0.02	0.001	0.10*	0.02	0.001
PCL-5	0.34*	0.02	0.001	0.29*	0.02	0.001
CESD10	0.25*	0.07	0.001	0.23*	0.07	0.002
PDSS	-0.43*	0.05	0.001	-0.35*	0.05	0.001
Other	-4.42*	1.87	0.019	-4.47*	1.80	0.014
SCC				0.30*	0.04	0.001
R^2	0.52			0.56		
F	94.49*			93.21*		
ΔR^2	0.52			0.03		
ΔF	94.49*			41.01*		

Note: *significant at $p < 0.05$; *B* = unstandardized regression coefficient; SE_B = standard error of the coefficient.

Hypothesis 7: The PROCESS extension in SPSS were used to evaluate if self-concept clarity (SCC) mediated the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q). Analysis for Hypothesis 1 indicated that there was no significant relationship between military self-expansion and reintegration difficulties; however,

the mediation analysis was still conducted for completeness as it was in line with the analytical plan, and to gain understanding about the other paths of the mediation model.

The overall model summary indicated the predictor previous military self-expansion, potential mediator self-concept clarity, and the covariates social desirability (SDS-17), biological sex, combat (DDRI-2), post-traumatic stress disorder symptoms (PCL-5), depression symptoms (CESD-10), post-deployment social support (PDSS), Other racial category, length of service, and income over \$81,000, accounted for 55% of the total variance ($R^2 = 0.55$) a large effect (Field, 2009), ($F(11, 504) = 59.15, p < 0.05$).

The results of the analysis indicated that the c path, the predictive association between previous military self-expansion and reintegration difficulties, was not statistically significant (WESQ; $B = -0.05, p = 0.08$). The a path, the predictive association between previous military self-expansion and self-concept clarity (WSEQ; $B = -0.07, p < 0.05$), and the b path was the predictive association between self-concept clarity and reintegration difficulties (SCC; $B = 0.29, p < .05$), both remained significant predictors when the c' path previous military self-expansion ($B = -0.03, p = 0.26$) was included in the model. See Table 18 for full details of the analysis. The bias-corrected bootstrap confidence intervals indicated that self-concept clarity (SCC) significantly mediated the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q). As such, there was a significant indirect effect ($a*b$) of previous military self-expansion (W-SEQ) on reintegration difficulties (M2C-Q) through self-concept clarity (SCC) $ab = -0.02$ (negligible effect size), $BC\ CI [-0.0418, -0.0029]$. See Figure 11 below for a visual representation of the mediation. The completely standardized indirect effect of previous military self-expansion (WSEQ) on reintegration difficulties (M2C-Q) is -0.02 , with bootstrapping SE of 0.01 , and a $BC\ CI [-0.0441, -0.0030]$.

Table 18

PROCESS extension predicting M2CQ from SDS-17, biological sex, DDRI-2, PCL-5, CESD-10, PDSS, Other racial category, length of service, Over 81k, SCC, and W-SEQ.

Variable	<i>B</i>	<i>SE_B</i>	<i>p-value</i>
Constant	13.59*	3.94	0.001
SDS-17	-0.50*	0.11	0.001
Biological sex	0.16	0.89	0.856
DDRI-2	0.09*	0.02	0.001
PCL-5	0.29*	0.02	0.001
CESD-10	0.23*	0.07	0.002
PDSS	-0.33*	0.06	0.001
Other	-4.50*	1.81	0.013
Length of Service	-0.01	0.08	0.903
Over 81k	0.23	1.35	0.864
WSEQ	-0.03	0.03	0.260
SCC	0.29*	0.04	0.001

Note: ***significant** at $p < 0.05$; *B* = unstandardized regression coefficient; *SE_B* = standard error of the coefficient.

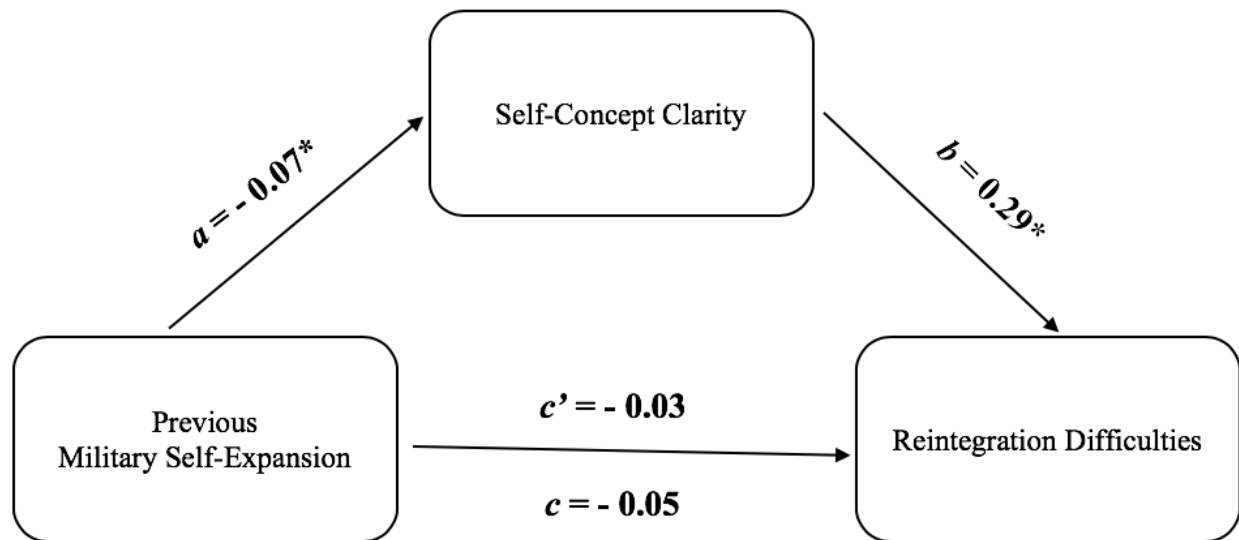


Figure 11. Visual representation of the mediation analysis with self-concept clarity (Hypothesis 7) ***significant** at the $p < 0.05$ level

CHAPTER IV

DISCUSSION

The current cross-sectional correlational study set out to investigate if reintegration difficulties among Veterans was associated with understudied variables above and beyond more commonly studied variables of psychological disorders, TBI, post-deployment social support, and combat exposure. More specifically, the study investigated whether self-concept clarity, identity fusion, and previous military self-expansion had predictive value for greater reintegration difficulties among Veterans. Hypotheses findings, implications, limitations, strengths, and ideas for future research are detailed in this chapter.

The specific aims of the study were to investigate:

- 1.) Whether previous military self-expansion was a significant predictor of reintegration difficulties.
- 2.) Whether previous military self-expansion was a significant predictor of identity fusion.
- 3.) If Veterans who endorse greater identity fusion endorsed greater reintegration difficulties.
- 4.) If identity fusion mediated the relationship between previous military self-expansion and reintegration difficulties.
- 5.) Whether previous military self-expansion was a significant predictor of self-concept clarity.
- 6.) Whether lower self-concept clarity was a significant predictor of greater reintegration difficulties.
- 7.) If self-concept clarity mediated the relationship between previous military self-expansion and reintegration difficulties.

Hypotheses Findings

Hypothesis 1: Veterans who reported greater previous military self-expansion will endorse greater reintegration difficulties. Previous military self-expansion did not significantly predict greater reintegration difficulties in this sample. This finding was in opposition with what was hypothesized for this sample of Post-9/11 combat Veterans. This hypothesis was developed based on literature demonstrating individuals who have experienced greater self-expansion in relationships (Aron, Aron, Heyman, Norman, & McKenna, 2000), roles such as a workplace (McIntyre et al., 2014) or social groups (Aron, Aron, & Norman, 2001), as well as through novel and challenging experiences (Lewandowski & Aron, 2004; Lewandowski et al., 2006), may experience self-concept constriction upon ending of a relationship or leaving a group or role (Lewandowski et al., 2006; Slotter & Gardner, 2014). Self-concept constriction has been associated with increased distress (e.g., depression, anxiety; Lewandowski et al., 2006), and often occurs when the supported self-expansion processes (e.g., military relationships, environment, and behavioral repertoire), are no longer present such as in civilian society.

For the current study, the hypothesis was grounded in the idea that Veterans who experienced greater previous military self-expansion while in the military and while on combat deployments, may experience self-concept constriction at the end of their military service and experience greater reintegration difficulties as a result. This hypothesis was not supported. It is possible the effect was muddled by the number of covariates included in the analysis. Due to concerns regarding this, exploratory analyses were conducted without covariates and with each covariate added individually (the hypothesis remained unsupported in final exploratory analysis including two covariates; see Appendix R for details).

The exploratory analysis for Hypothesis 1 revealed that previous military self-expansion did indeed significantly predict reintegration difficulties when there were no covariates included

in the model, with a small to medium effect size (.07). More specifically, greater previous military self-expansion predicted less reintegration difficulties, and this is a clinically meaningful finding. Notably, this finding was in opposition of what was hypothesized. Post-deployment social support was added to the model and explained 11% of additional variance. This addition of social support resulted in previous military self-expansion no longer being a significant predictor of reintegration difficulties. This suggests that Veterans in this sample did indeed experience previous military self-expansion that impacted their reintegration process, although not in the manner that was hypothesized initially.

Additionally, the original non-significant finding may be related to the fact that Veterans in this sample did not endorse significant reintegration difficulties overall, or perhaps did not experience notable self-constriction. Recall that the mean for reintegration difficulties measure was 19.27, with a standard deviation of 14.53, and a mode of 0 (the possible range of scores for the measure is 0 to 80). The overall low scores may suggest that reintegration difficulties for the current sample may have been too low to sufficiently investigate the potential relationship between the variables of interest. Another possibility is that reintegration difficulties could have been relatively low due to maintaining sufficient ties to the military to maintain the expansive self. There may have been something unique to the participants in our study that resulted in them having generally low levels of reintegration difficulties. When compared to Sayer and colleagues (2011) study, the sample here did endorse less reintegration difficulties in comparison to their study. For example, for their study, the weighted mean scores ranged from 1.66 to 2.12, whereas in the current study the weighted mean was 1.20 (Sayer et al., 2011). However, their sample was a VA user sample, and as such is notably different than non-VA users (Sayer et al., 2015). Additionally, Sayer and colleagues (2015) noted that VA users were more likely to suffer

TBI, PTSD, medical issues, and reintegration difficulties (Sayer et al., 2015). However, this does not mean that Veterans who do not use the VA are symptom free and have no difficulties with reintegration, rather it demonstrates that VA users endorse greater severity of those difficulties (Sayer et al., 2015).

Another possibility could be that the individuals who experienced significant previous military self-expansion also experienced significant self-expansion upon return to civilian society; as such, the reintegration difficulties were buffered. Unfortunately, in this study we did not assess for self-expansion after leaving the military and thus cannot test this idea. Recall that time since separation from the military ranged from one year to 16 years ($M = 5.33$; $SD = 3.99$) in this study; however, length of time since separation from military was not a significant predictor of reintegration difficulties in this sample.

The scale we used for previous military self-expansion could also have been a poor measure for the targeted construct here. This could be due to being adapted for the first time for examining self-expansion and military service. While McIntyre and colleagues (2014) adapted the self-expansion measure (to past tense and a workplace context) without issue, they did so in a civilian sample. Of course, it is also possible that previous military self-expansion is simply not a good indicator of reintegration difficulties.

The covariates included in the first model were significant, and when the previous military self-expansion variable was included in the second block, they all remained significant and directionality did not change. Social desirable responding was negatively associated with reintegration difficulties, meaning greater social desirable responding was a significant predictor of report of less reintegration difficulties. This would likely suggest that those with higher

socially desirable responding would likely respond in a manner suggestive of minimal reintegration difficulties.

Post-deployment social support was significantly predictive of less reintegration difficulties. This is consistent with what is well known about social support and is consistent here to reintegration difficulties. As a reminder, the PDSS measure taps into the civilian society supports, such as friends and family members, it assesses for perceived support in regard to psychological support and functional support of needs. Veterans in this sample endorsed having overall adequate support (i.e., mode of 50 on this measure with highest score possible being 50, with the mean being 37.25), and this support was important for less reintegration difficulties. This finding is novel to the particular sample in that it was not a clinical or VA-specific sample, meaning the findings were consistent with clinical samples.

Combat experiences was also a significant positive predictor of greater reintegration difficulties, which is consistent with past research. Sayer and colleagues (2015) whom also used the same measure used in this study investigating reintegration difficulties noted that Veterans who were deployed to combat zones reported greater reintegration difficulties (Sayer et al., 2015). The measure used here to assess for combat experiences was based solely on objective experiences (e.g., number of times fired weapon at an enemy) and did not include an evaluation of perceptions of combat (e.g., fear, pain). As mentioned in Chapter One, combat has an impact on various domains of the Servicemember exposed to it. It is common for combat to increase hypervigilance, sleep deprivation and sleep difficulties, gastrointestinal issues (e.g., diarrhea, loss of appetite), and irritability (Grossman & Christensen, 2007). These difficulties may continue, as well as others, into civilian society even without the presence of psychopathology or physical disorders. This finding demonstrates that the particular non-clinical VA sample was consistent

with VA and clinical sample findings in regard to difficulties associated with combat experiences and reintegration.

As expected, Veterans with more post-traumatic stress and depressive symptoms were both significantly more likely to endorse greater reintegration difficulties. These findings are consistent with past research showing that Veterans struggling with psychopathology are also more likely to struggle with reintegration difficulties overall (e.g., relationships, employment, education) in a clinical VA sample. For example, in Sayer and colleagues' (2011) validation study of the M2C-Q, they noted individuals struggling with PTSD or depressive symptoms also endorsed higher M2C-Q scores when compared to Veterans who did not endorse these symptom (Sayer et al., 2014). Interestingly, this non-VA sample endorsed similar difficulties in relation to symptomatology to clinical VA samples.

The covariate Other racial category was a significant predictor of less reintegration difficulties; an interesting finding and it is not clear as to why this may be. Sayer and colleagues (2011) noted that there was a significant difference between White and non-White Veterans, in that non-White Veterans reported more reintegration difficulties based on the military to civilian questionnaire (M2C-Q) in a sample used was a VA sample of OEF/IF combat Veterans (Sayer et al., 2011). Unfortunately, while Sayer and colleagues (2011) had racial categories broken down into White, non-Hispanic, African American, Hispanic, Asian, American Indian or Pacific Islander, and Multiracial for demographic information, they did not evaluate or report potential differences at this level (Sayer et al., 2011). Thus, it remains unclear as to why the Other racial category was a significant predictor of less reintegration difficulties, and why this is actually in opposition of what Sayer and colleagues found regarding the non-White racial category (Sayer et al., 2011) in relation to the M2C-Q.

Hypothesis 2: Veterans who reported greater previous military self-expansion will report greater identity fusion. Previous military self-expansion was a significant predictor of identity fusion with a medium effect size (0.20), a clinically significant effect. Curiously, greater previous military self-expansion significantly predicted lower identity fusion. Thus, the directionality of the hypothesis was not supported in this sample. As previously discussed, identity fusion is a sense of oneness with a group and is often found among family members (Swann et al., 2009). The hypothesis was based on the idea that becoming a military member provides self-expansion via boot camp, military traditions and customs, as well as combat deployment. These experiences would provide self-expansion via novel relationships, challenging and exciting experiences, development of skills and knowledge, and group membership. Additionally, combat experiences specifically would provide a multitude of opportunities for self-expansion that may promote the development of identity fusion. These experiences of self-expansion were thought to have promoted the development, and strength, of identity fusion within military culture. However, this was apparently not the case and perceived previous military self-expansion was actually associated with lower levels of identity fusion. It is possible that there is an additional variable that is impacting the directionality of previous military self-expansion in relation to reintegration difficulties that has not been captured in this study.

While Swann and colleagues (2012) did not explicitly discuss self-expansion, they did discuss components of the process, as well as discussion of the Inclusion of Other in Self (revisit Chapter One) even though the term ‘self-expansion’ is not used to describe the ideas. Alternatively, according to Swann and colleagues (2012), there are a few instances in which defusion (i.e., demonstration of lesser identity fusion) may occur, including “the disbanding of the

group or completing one's terms of service with the group" (p. 450), here that would be a Servicemember transferring to Veteran status. Although, even then de-fusion is unlikely, as those who "... fuse with a group, they will tend to remain fused with that group" (Swan et al., 2012, p.10) according to the irrevocability principle of identity fusion (as discussed in Chapter One), and fused individuals would, "... theoretically entail substantial restructuring of the self-concept, one's relation to other, and even the very meaning of one's actions (p. 10). Swann (2012) argues that those who were previously strongly fused with the group would experience distress when they are no longer part of the group (e.g., term of service is complete), and may make attempts to reinstate with the group (e.g., re-enlistment) to alleviate this distress. Perhaps in our sample, because reinstatement did not occur, individuals who experienced a lot of previous military self-expansion (and were likely strongly fused) defused after their service ended as a way to cope with the transition. Unfortunately, in this study we did not assess for previous identify fusion and cannot empirically examine whether and for whom defusion occurred.

Jong, Whitehouse, Kavanagh, and Lane (2015) found that those who had negative shared experiences and traumatic shared experiences, were more fused and in particular when there was reflection regarding the negative shared experiences. In their study one example was of the 2013 Boston Marathon Bombing where those who had been more exposed to the event and/or details and reflected on the experiences they had, were more fused to Boston than Bostonians who reflected less on the events. Additionally, those Bostonians who endorsed "... severity of physical, emotional, or other suffering as a result of the incident also reflect more on their experience ..., and participants who reflected more on their experience were more fused with Boston ... (Jong, Whitehouse, Kavanagh, & Lane, 2015, p. 6). The findings of their study may

offer some future direction regarding how identity fusion may develop if it is indeed unrelated to self-expansion.

Defusion may have also occurred if the morale of the group is destroyed due to various reasons such as “... one group member betrays another group member in a manner that is unforgiveable, ejection from the group ...” (Swan et al., 2012, p. 10). A final instance that Swann and colleagues (2012) identified for defusion was if the individual determines the group fused with has gone against or severely modified the “core values and beliefs” of that group. These are all possibilities that could shed light on the interesting finding in this sample that greater previous military self-expansion predicted less current identity fusion. That is, perhaps those who experienced greater previous military self-expansion and previous identify fusion were more impacted by perceived betrayals or value infractions by the military, and were more likely to defuse and thus have lower current identify fusion scores. We did not assess for perceptions of betrayals or military going against important values, thus we do not have the data to empirically test these potential explanations.

In regard to the included covariates for this hypothesis, the covariates remained significant when previous military self-expansion was included, and directionality remained consistent. Socially desirable responding was a significant predictor of Veterans’ endorsing less identity fusion, which is an interesting finding and it is unclear as to why this might be. Longer length of military service was a significant predictor of less identity fusion, which is in opposition with previous literature. For example, Lancaster and colleagues (2018) conducted a validity study on the WIS-R measure and found identity fusion increased as the number of years served increased (Lancaster, Kintzle, & Castro, 2018). Length of time since military separation also significantly predicted less identity fusion in the current study. This finding is in

contradiction with the identity fusion theory, in that length of time since group separation should not have an impact on identity fusion (Swann et al., 2009). These findings about the length of time in service as well as the length of time since separation may reflect potential issues with the WIS-R measure as mentioned in the Measures section under Methodology. More specifically, the measure has undergone additional revisions since used in the current study and the revised measure was utilized in the Lancaster and colleagues (2018) validation study. An additional possibility may be that the current study sample simply was not a highly fused group. However, this is not likely the total score mean of the sample was 61.70 (highest possible score being 94), with a mode of 70.

Being a member of the Marine military branch was a significant predictor of experiencing less identity fusion. Marines “are indoctrinated with a strong belief in their chain of command and the importance of *esprit de corps*, a spirit of enthusiasm and pride in themselves and the corps” (Schading & Schading, 2007, p.90), and “The Marines serve as America’s “first to fight” where rapid deployment, action, and success are critical” (Schading & Schading, 2007, pg.90). Based on this past literature, Marines in theory should have been highly fused while serving (which was not measured here). It is unclear why Veterans who had served in the Marines were significantly less likely to endorse current identity fusion. Perhaps these Veterans were more likely to defuse compared to Veterans from other branches. Or perhaps our sample was simply different from past samples and the Marine branch did not experience as much fusion during service or after service, which is speculative since we do not assess for fusion while they were in the military.

Lastly, being legally single was a significant predictor of greater identity fusion among Veterans in the current sample. It is unclear as to why this may be due to the lack of information

regarding if the Veterans were single while in the military, or just since being out of the military. Thus, we can only speculate about this finding. For example, perhaps single Veterans are more strongly fused currently due to lacking in-depth connections at home.

Hypothesis 3: Veterans who endorse greater identity fusion will endorse greater reintegration difficulties. Veterans endorsing greater identity fusion significantly predicted greater reintegration difficulties, supporting Hypothesis 3. While the finding was statistically significant, the effect size was quite small, explaining only an additional 1% of the variance of reintegration difficulties. While extremely small effect sizes may be clinically relevant and important, such as factors explaining variance of suicide, identity fusion in the context of reintegration difficulties may not be worthy of additional study resources at this time. The small effect size may have been associated with the number of covariates included in the model (six total covariates: SDS-17, DDRI-2, PCL-5, CESD-10, PDSS, and Other Racial Category).

Identity fusion would be adaptive while in the military culture, as well as while on combat deployment. More specifically, strongly fused individuals would prioritize the group, engage in extreme behaviors as needed to support the unit and overall mission of the military group, as well as self-sacrifice for others in the unit or group overall (Swann et al., 2010; Swann et al., 2012; White et al., 2014). When the individual transitions into civilian society as a Veteran, the environmental supports are no longer present for the military group identity; however, as Swann and colleagues (2012) have found, strongly fused individuals tend to remain fused regardless of environment. This could contribute to reintegration difficulties, as the fused identity may impair the individuals functioning in the United States civilian society that holds values in opposition to military values in many regards (see Chapter One under Military Culture). Swann and colleagues (2012) stated “The single-mindedness of highly fused

individuals may thus impair their ability to display sufficient role flexibility needed to maintain healthy relationships with individuals who are not members of the fused group” (Swann et al., 2012, p.10), and these suboptimal relationships may contribute to reintegration difficulties. This finding represents the first statistical support of the theoretical predictions made by Swann and colleagues; however, clinical significance remains lacking at present.

In regard to covariates included in the model for this hypothesis, all remained significant and directionality remained consistent with the addition of identity fusion into the model. Greater socially desirable responding was again a predictor of less endorsement of reintegration difficulties, suggesting that Veterans recognize that it is socially desirable to not admit to or endorse having difficulties or feel they are struggling. This idea is in line with Sharp and colleagues (2015) study, a meta-analysis of military stigma and mental health. The results of their study were that many Veterans believed they may be seen as weak, others see them as less confident, or that they may be treated differently if they admitted to and sought out assistance with difficulties they were experiencing (Sharp et al., 2015). Sharp and colleagues (2015) rationalized that the stigma may be related to the masculine and warrior-like culture of the military overall. Consistent with past literature on social support and covariate results for Hypothesis 1, greater post-deployment social support was a significant predictor of less reintegration difficulties. Similarly, endorsement of having more combat experiences were associated with greater reintegration as expected (see Hypothesis 1 discussion above for details on rationale). And as expected, endorsement of more post-traumatic stress and depression symptoms were associated with greater reintegration difficulties (see Hypothesis 1 discussion above for details).

Hypothesis 4: Identity fusion will mediate the relationship between previous military self-expansion and reintegration difficulties. Identity fusion did not mediate the relationship between previous military self-expansion and reintegration difficulties. More specifically, previous military self-expansion was not indirectly related to reintegration difficulties through the effect on identity fusion, thus Hypothesis 4 was not supported. Notably, it is important to remember the previous military self-expansion construct was not a significant predictor of reintegration difficulties, as demonstrated in Hypothesis 1. However, previous military self-expansion was a significant predictor of identity fusion, as demonstrated in Hypothesis 2, but in the opposite direction predicted and with a very small effect size.

This finding is interesting as it was thought that self-expansion via novel and challenging experiences, as well as the development of additional skills (Lewandowski & Aron, 2004) would be one avenue of identity fusion development. Further, it was thought that identity fusion may develop via self-expansion (and thus greater previous self-expansion would result in greater identity fusion) experienced on combat deployments and combat experiences. This would have aligned with Swann and colleagues' (2010) hypothesized explanation of the development of identity fusion through one highly emotional experience or repeated experiences, fostering a family-like bond (Besta et al., 2016; Swann et al., 2012). Bootcamp experiences, training experiences, and deployments, as well as combat experiences would qualify as highly emotional experiences to varying degrees. The independent or cumulative effect of these extremely challenging self-expansion experiences were thought to likely influence the development of identity fusion, and in turn, greater identity fusion influences reintegration difficulties upon return to the civilian society. However, the results of this study suggest that previous military

self-expansion and identity fusion are not significantly related as theorized by previous scientists.

It is also possible the findings here are that we investigated previous military self-expansion and current identity fusion and the time difference in measurements muddled the results. It is possible that self-expansion while in the military would have predicted greater identity fusion while in the military (something we unfortunately did not assess), but that relationship did not carry forward to identity fusion after the transition to becoming a Veteran. Thus, the findings here could be an artifact of one variable being retrospective and one being current. However, McIntyre and colleagues (2014) used different time-points and examined previous self-expansion in the workplace and current self-concept clarity without issue in a civilian sample. We replicated the temporal nature of the measures from McIntyre et al. (2014) in the current project because of the success of their study and because we were also interested in the impact of a lost source of self-expansion (thus previous self-expansion needed to be assessed and examined in relation to a current variable of interest). It may be that the self-expansion measure did not adapt well to the military, whereas it has been used without issue in civilian research. However, we were able to replicate the finding from McIntyre et al. (2014) that previous self-expansion was significantly negatively related to current self-concept clarity (Hypothesis 5), suggesting that the adaption of the self-expansion measure for a military population worked.

Another possible explanation for why this hypothesis was not supported by the current project may be due to the current sample not endorsing major reintegration difficulties overall ($M = 19.27$, $SD = 14.53$, mode = 0, range = 0-80). Perhaps an unknown variable not included in this

study is involved in the development of identity fusion and/or self-expansion in a way that undermines the direct effect between these two variables.

The included covariates, together, explained a significant portion of reintegration difficulties with a large effect size. These findings mean the known, commonly studied variables (e.g., PTSD, depression), are consistent with VA and clinical samples of Veterans. These known, commonly studied variables remain important and clinically significant for Veterans both in and out of VA settings. As shown in previous hypotheses above utilizing reintegration difficulties as a criterion variable, the covariates socially desirable responding and post-deployment social support both significantly predicted less endorsed reintegration difficulties. Whereas, again as shown in previous hypotheses, endorsement of more PTSD, depressive symptoms, and combat experiences, also significantly predicted greater reintegration difficulties. These findings are consistent with the information provided in Chapter One regarding reintegration difficulties of Veterans. As identified in previous hypotheses above with reintegration difficulties as the criterion, length of service, length since military separation, and being within the Marine branch, significantly predicted less reintegration difficulties. Whereas, being legally single was associated with less reintegration difficulties, and as previously shown in Hypothesis 2, was a significant predictor of greater identity fusion. In addition, as demonstrated in Hypothesis 1, Other racial category was again associated with less reintegration difficulties.

Hypothesis 5: Veterans who report greater previous military self-expansion will report lower self-concept clarity. Veterans endorsing greater previous military self-expansion exhibited significantly lower current self-concept clarity, Hypothesis 5 was supported. While self-concept clarity uniquely added a small effect (0.03), it may be clinically meaningful due to the impact self-concept clarity may have on Veteran's overall functioning within society as seen

with previous literature with consistent findings in civilian society (e.g., Demers, 2011; Lewandowski, Aron, Bassis, & Kunak, 2006; McIntyre, Mattingly, Lewandowski, & Simpson, 2014; Slotter et al., 2010). As previously mentioned, when individuals experience a loss of a relationship (Lewandowski, Aron, Bassis, & Kunak, 2006), a role (McIntyre, Mattingly, Lewandowski, & Simpson, 2014), or a group membership (Lewandowski et al., 2006; Slotter & Gardner, 2014), the self-concept often constricts, and this results in a reduction in self-concept clarity (Slotter et al., 2010; McIntyre, Mattingly, Lewandowski, & Simpson, 2014). Thus, these findings are consistent with the self-expansion model in that the novel and challenging experiences and relationships (i.e., service, combat deployments) that occur during military service offered individuals opportunities to expand their self-concept (Aaron, Aron, Heyman, Norman, & McKenna, 2000; Lewandowski et al., 2006). This discovery is also consistent with previous literature reviewed supporting the finding that leaving a previously self-expanding environment is associated with lower self-concept clarity due to the constriction of the self-concept (Guerrettaz & Arkin, 2016; Light & Visser, 2013; Slotter et al., 2015). As such, this is the first study to extend the theories of self-expansion, self-concept, and self-concept clarity to the military. Veterans who have merged the military culture into their self-concept may feel less sure of who they are in the civilian society. As such, these findings are in support of current literature, and extend additional information to the transition between military culture and civilian culture. In addition, these findings support the findings from McIntyre and colleagues (2014) in which the self-expansive process can be investigated both presently and retrospectively (McIntyre et al., 2014).

In regard to the covariates included, greater socially desirable responding significantly predicted endorsement of lower self-concept clarity. This is in contradiction of previous studies

evaluating self-concept clarity. For example, Campbell and colleagues (1996) found social desirability to be positively correlated with self-concept clarity (Campbell et al., 1996). It could be that Veterans who are engaging in greater socially desirable responding, are less clear about who they are. This could be driving agreeableness as they are unclear of their own preferences. Biological sex was a significant predictor of lower self-concept clarity, such that being female was a significant predictor of lower self-concept clarity compared to males. This is consistent with prior literature findings. For example, Campbell and colleagues (1996) found females tended to have lower self-concept clarity compared to males in their civilian sample (Campbell et al., 1996). Nardone (2012) found similar results, in that females endorsed significantly less self-concept clarity compared to males (Nardone, 2012). Length of service in the military was associated with lower self-concept clarity. It may be that those who were in the military longer established a stronger bond, or fusion, with the military culture such that leaving this group impacted them more strongly. McIntyre and colleagues (2014) found that civilians who experienced greater self-expansion in their job also experienced lower self-concept clarity at the loss of that job (McIntyre, Mattingly, Lewandowski, & Simpson, 2014); however, they did not find tenure of the position to be a significant predictor of lower self-concept clarity as seen in the current study. It may be that length of service have different impacts in civilian and military workplaces. Those endorsing having an income over \$81,000 was a significant predictor of lower self-concept clarity. It is unclear as to what may be driving this finding regarding income at this time.

Hypotheses 6: Veterans who endorsed lower self-concept clarity will endorse greater reintegration difficulties. Greater self-concept clarity significantly predicted greater reintegration difficulties, as such Hypothesis 6 was supported. Self-concept clarity added a

unique contribution to explaining reintegration difficulties, but was a small effect overall; however, self-concept clarity of Veterans may be a clinically relevant and important finding. As mentioned in Chapter One, previous literature supports the idea that one's understanding, or lack of, who they are as a whole individual and lack of stability in that understanding (i.e., lower self-concept clarity) could impair one's ability to reintegrate (Demers, 2011; Lancaster & Hart, 2015). As highlighted above in the discussion of Hypothesis 5, loss of a relationship, role, and group membership may trigger the constriction of the self-concept, reducing self-concept clarity (McIntyre, Mattingly, Lewandowski, & Simpson, 2014; Slotter et al., 2010; McIntyre et al., 2014). Lower self-concept clarity is associated with difficulties such as distress (Lewandowski et al., 2006), as such the current finding of endorsement of greater self-concept clarity being a significant predictor of more reintegration difficulties is rather interesting.

However, as discussed in Chapter One, Slotter and colleagues (2010) pointed out that while low self-concept clarity may be associated with heightened distress, it may be needed to allow for modification of the self-concept to regain clarity in the new environment (Slotter et al., 2010). An individual who endorsed greater identify fusion, would likely be clear about their self-concept overall, allowing for greater self-concept clarity. This was the case in our study, as Veterans who reported greater identity fusion with the military group also reported higher self-concept clarity (SCC and WISR were significantly positively correlated, see Table 11). This is consistent with Besta and colleagues' (2016) findings in a civilian sample that greater identity fusion was a predictor of greater self-concept clarity (Besta, Mattingly, & Blazek, 2016).

Because low self-concept clarity is associated with distress, Veterans with higher self-concept clarity may be less likely to be open to modification of the self-concept (which would

reduce clarity, at least temporarily) to adapt to a new context. From this frame of thinking, higher self-concept clarity would have predicted greater reintegration difficulties as found here.

If this speculation were to be accurate, it would make sense that those with greater identity fusion would have greater self-concept clarity and would have greater reintegration difficulties. This would also indicate that those with greater self-concept clarity and identity fusion with their previous military identity, would have less self-concept clarity with civilian identity. Said another way, it is possible that endorsement of greater identity fusion may allow for greater self-concept clarity among Veterans. This in turn may inadvertently increase reintegration difficulties. This was tested as exploratory analyses as we have the data to do so (see exploratory analyses in Appendix S and T). Greater identity fusion was a significant predictor of greater self-concept clarity as speculated. The unique contribution of identity fusion, while a small effect size (0.04), may be clinically important for Veterans with reintegration difficulties when considered in conjunction with self-concept clarity. To evaluate the idea that stronger self-concept clarity would mediate the relationship between identity fusion and reintegration difficulties, an exploratory analysis was conducted (see Appendix T). First the analysis was conducted without any covariates to evaluate if there was indeed a mediation of the variables of interest. The results indicated that self-concept clarity did mediate the relationship between identity fusion and reintegration difficulties, with a small effect size. Veterans who were more strongly fused and endorsed stronger self-concept clarity had greater reintegration difficulties. While the effect was small, it could be argued that those who are strongly fused *and* have solid self-concept clarity, could benefit from intervention preventatively if possible, or at least treatment geared at assisting with the reintegration process if identified as strongly fused

and endorsing greater self-concept clarity. This is discussed further in the implications section to follow.

Regarding covariates, as noted in previous hypotheses above, socially desirable responding, Other racial category, and post-deployment social support were significant predictors of less reintegration difficulties. Consistent with previous hypotheses above regarding reintegration difficulties as well as previous research findings, greater PTSD and depressive symptoms, as well as combat experiences were all significant predictors of greater reintegration difficulties being present.

Hypothesis 7: Self-concept clarity will mediate the relationship between self-expansion and reintegration difficulties. As noted in previous hypotheses greater previous military self-expansion predicted lower self-concept clarity as expected. Self-concept clarity was also found to mediate the relationship between previous military-self expansion and reintegration difficulties with a small effect. More specifically, previous military self-expansion was indirectly related to reintegration difficulties through the effect on self-concept clarity and Hypothesis 7 was supported. However, interestingly, greater previous military self-expansion predicted less reintegration difficulties through self-concept clarity, which was the opposite direction of effects as expected as discussed previously, and with a small effect size, although clinically meaningful.

The finding that greater previous self-expansion was associated with lower self-concept clarity was consistent with previous literature (Lewandowski, Aron, Bassis, & Kunak, 2006; McIntyre, Mattingly, Lewandowski, & Simpson, 2014; Slotter et al., 2010). Veterans' identity as a military group Servicemember may be questioned as they attempt to reintegrate into civilian society and may prompt lower self-concept clarity. As such, Veterans may struggle with

balancing their identities as a military Servicemember, a Veteran, and as the civilian they used to be.

As previously discussed, reductions in self-concept clarity are associated with distress (Lewandowski et al., 2006). Yet the current study found that greater self-concept clarity (rather than lower self-concept clarity as predicted) was associated with greater reintegration difficulties (see Hypothesis 6 above for discussion as to why this may be). It is important to note that we are not suggesting that Veterans should avoid self-concept clarity as a means of reducing reintegration difficulties. Rather, the findings here offer novel information regarding reintegration difficulties that go beyond psychopathology and physical issues and suggest that self-concept and identity are topics worthy of discussion as clinicians assist our Veterans in the reintegration process.

In regard to covariates included in the mediation, socially desirable responding, post-deployment social support, length of service, as well as being in the Other racial category were consistent with the above hypotheses findings as being significant predictors of less reintegration difficulties. Being in the above \$81,000 income category was also associated with less reintegration difficulties. This could be associated with having certain protective factors associated with being financial secure and well off. Combat experiences, PTSD and depression symptoms were again all found to be significant predictors of greater reintegration difficulties as expected based on previous research on reintegration issues addressed in Chapter One and Two. Biological sex was not found to be a significant predictor of reintegration difficulties. While there were no hypotheses regarding biological sex in relation to reintegration difficulties, this finding is surprising in that past literature has consistently found the opposite. While research on female Veterans remains inadequate and in need of attention, the findings here were inconsistent

with previous literature findings. For example, as noted by the Disabled American Veterans (DAV), noted “Our nation does not yet adequately recognize and celebrate the contributions of women in military service, treat them with dignity and respect, or promote their successful transition to civilian life” (DAV, 2016; p.2). Additionally, female combat Veterans tend to have less social support, are more likely to be single, and may face different stressors upon returning to civilian society, of which many programs are geared to males (DAV, 2016).

Study Implications

Reintegration is a complex process that varies for each unique individual. Obtaining a better understanding of what contributes to Veteran reintegration, in general, would allow for us to better understand ways in which civilian and military culture can better accommodate Veterans’ needs. Previous research and clinical approaches often view reintegration difficulties through a pathological lens. In other words, when Veterans struggle with reintegration, psychological and physical pathology is often hypothesized as the driving force. However, it is important to also investigate reintegration difficulties outside the context of pathology, as there is ample evidence that Veterans without diagnoses also experience reintegration difficulties. The current study highlighted that Veterans who may not be of a clinical sample demonstrate consistent difficulties as clinical VA samples, suggesting additional outreach and resources are needed for Veterans.

No study, to the best of our knowledge, prior to this study, had investigated identity fusion from the perspective of self-expansion and self-concept clarity. In addition, no study had examined the effect identity fusion had on the association between self-expansion and reintegration difficulties. Lastly, no study had examined the effect self-concept clarity had on the

association between self-expansion and military reintegration difficulties. These were notable gaps in the literature that the current study set out to fulfill.

Research Implications.

It is unclear as to why the previous military self-expansion variable performed in a way that was unexpected regarding predicting identity fusion (predicting less fusion) and reintegration difficulties (nonsignificant and in opposite direction of prediction). This opens the door for future investigations of self-expansion of the military service and/or self-expansion of the Veteran identity. Identity fusion has been shown to be a visceral or more emotional construct, and perhaps self-expansion was an inadequate explanation of the development of identity fusion due to this. Swann and colleagues (2010) have noted that elevated autonomic arousal has demonstrated to be a predictor of increases in identity fusion. Thus, perhaps a measure pulling in more of this type of experience rather than self-expansion would be more appropriate. For example, using combat experiences instead, as this would likely tap into the potential for elevated autonomic arousal described by Swann and colleagues (2010). Additionally, there may be an unknown variable that could be mediating or moderating the relationship between previous military self-expansion and reintegration difficulties.

The current study provided further support for previous literature findings. As expected, greater previous military self-expansion resulted in lower current self-concept clarity. This is consistent with studies described in Chapter One focusing both on current self-expansion as well as retrospective work-related self-expansion focusing on civilians. This study extended these two constructs from civilian sector to military. In addition, the current study offered the novel finding that self-concept clarity was indeed a significant mediator between previous military self-

expansion and reintegration difficulties of Veterans. This offers insights into additional areas of study that would be worthy of further investigation.

The finding that greater identity fusion significantly predicted greater reintegration difficulties for Veterans was an exciting finding; however, the effect size was extraordinarily small and unlikely clinically significant. The statistically significant finding is consistent with what Swann and others have theorized in the past and this study provides the first evidence empirical evidence for this previous speculation. This finding provides a novel area of investigation for possible future studies, for example additional research could delve into the mechanisms behind this effect, factors that may moderate the effect, and individual differences that inform the effect. From a methodological perspective, it would be interesting to utilize the visual identity fusion scale (recall Figure 3 in Chapter One) to see if the reintegration difficulties effect would replicate with a different measure and a larger effect size. Ideally a future study would use both the visual identity fusion scale (modified for a military context) and the WIS-R utilized in this study so that comparison of the two in regard to reintegration difficulties would be possible. Should the modified visual identity fusion scale prove to be as effective of a measure as the WIS-R, this would be helpful information for future researchers (the visual identity fusion scale is 1 item compared to the WIS-R's 31 items). However, it could be argued that due to the extremely small effect size, it may be more important to keep resources and energies on the already known and commonly studied variables (as these contributed the most in our models) due to the potential for insignificant clinical importance of fusion.

The finding that greater self-concept clarity predicted greater reintegration difficulties is worthy of additional investigation to determine what may be occurring, including whether or not our speculations about this result (see Discussion) are correct. Specifically, future research could

replicate and extend the exploratory analyses that we conducted (see Appendix S and T) which showed that self-concept clarity was associated with greater identify fusion and mediated the relationship between fusion and reintegration issues (this mediation did not remain significant once all covariates were accounted for, future research with larger samples are thus needed to determine whether a true mediation effect exists above and beyond the effect of covariates). Additionally, this study extended the theory of self-concept clarity to Veterans, and the current findings are inconsistent with previous literature within the civilian realm. While unexpected, this is an exciting finding as it can offer areas of future research in the investigation of self-concept clarity within the military culture and reintegration difficulties.

The current study demonstrated it is possible to conduct online research with Veterans using adequate military verification checkpoints. Additionally, the current study provided support that Post-9/11 combat Veterans are accessible online via MTurk, and there were nearly equal distributions of males and females attained. Future research could utilize MTurk to replicate the current study, as well as continue to utilize MTurk as a recruitment medium. Lastly, female Veterans were accessible on MTurk and the literature would benefit from additional studies focusing on the inclusion of female Veterans or studies focusing solely on female Veterans, as currently the experiences of female Veterans is extremely understudied and thus not well understood.

Finally, this study found that PTSD, depression, alcohol abuse, combat exposure, and TBI are consistently associated with greater reintegration difficulties, even in non-clinical non-VA Veteran samples. Further, social support, even when non-military, has demonstrated to be a protective factor against reintegration difficulties even in a non-clinical non-VA sample.

Clinical Implications.

With additional research, and if the results consistently support that greater identity fusion predicting greater reintegration difficulties, then this would provide an interesting area to consider for reintegration programs and therapeutic domains. However, currently, due to the very small effect sizes, the clinical relevance is debatable as is the feasibility to use additional resources to continue studying these novel variables. However, many Veterans have reported they feel they no longer know how to relate and interact with civilians. This finding was partially supported in the current study (albeit unlikely of clinical significance). For example, Veterans strongly fused with the military culture (i.e., values, customs, views, language), would be more prone to have difficulty reintegrating into the civilian society. Pre-separation programs could educate Veterans on this, as most have reported that they are briefed on education, job, mental health, and physical health areas in a nutshell upon discharging. Discussion of identity, clarity of self, and cultural differences, as well as how to manage them could be beneficial to Veterans if easily integrated into already existing programs without much additional resources or time/energy expenditure. For example, rather than new lengthy programs or significant additions to current programs, clinicians could simply use currently standing programs and provide some additional information about how deployments may impact the self.

One avenue that could be utilized to act as a protective factor for Veterans is engagement with other Veterans in civilian society. The idea here would be to have the Veterans remain connected with the military culture while they are also connected to the civilian culture, and this is used in many VA settings presently and is being developed in others. This may be particularly important for Veterans who endorse greater identity fusion and greater self-concept clarity. It could also be one way to assist the Veteran in developing balance with multiple identities held. The idea of maintaining the military social supports is adaptive and promotes overall wellbeing

(Williams et al., 2016), while re-engaged in civilian society. The study conducted by Williams and colleagues (2016) found that cohesion may be an important factor in overall psychological health in new Servicemembers and would likely apply to Veterans as well. Thus, the results of this study indicates that a previously known and commonly studied variable, social support, is important to a broad range of Veterans (including those without diagnoses and who may be using VA services).

Importantly, the current study identified additional support for reintegration difficulties that is consistent with known contributions for VA-associated Veterans such as combat exposure, and psychopathology, as well as known protective factors such as social support. This information offers additional support for what is already known in regard to Veterans struggling with reintegration with pathology, but here, these Veterans did not necessarily endorse significant psychopathology symptoms. Should replication and extension studies yield promising results of the novel variables (self-concept clarity and identity fusion), these variables could be addressed to bolster reintegration programs.

Regarding reintegration programs, these results may offer additional areas to be considered and discussed with the Servicemembers transitioning to Veteran status, if future studies consistently replicated these findings. Many Veterans in previous studies have noted that they feel they do receive information for education, careers, and mental health management, but do not feel there was adequate attention on their overall reintegration as a person (e.g., identity and the impact changes there may have; Yosick et al., 2012). While the effect sizes were small in regards to identity fusion in the current study, it is unclear if it holds clinical significance at this time due to the novel nature in relation to reintegration difficulties.

Regarding the clinical domain, taking on a holistic approach to the Veteran's overall needs and care would allow for assistance in areas such as self-concept clarity and fusion, rather than a sole focus on symptom resolution. More specifically, if a holistic approach is taken, perhaps Veterans would consider asking for help more often when they are having difficulties within areas of their life even if they do not meet criteria for a psychological or medical diagnosis. Educating society, mental health practitioners, medical professionals, and Veterans alike, that one may struggle even when there are no diagnoses or disorders present. This is also important because Veterans struggling with reintegration may develop psychopathology in time if the difficulties continue.

Thus, these results could be used for outreach and provide education to Veterans in the community as well as clinicians to bolster current treatment efforts, and to draw in Veterans who are struggling with identity issues as addressed in the above hypotheses sections. Veterans may not present for mental health concerns due to the related stigma of psychopathology. Education regarding the impact of identity fusion and self-concept clarity may have on reintegration efforts and psychological wellbeing may allow Veterans to feel safer seeking assistance for identity concerns related to reintegration (e.g., self-concept clarity).

The current study also offers a better understanding of how military service, and identity fusion and self-concept clarity with the military culture (recall also see exploratory analyses), may leave a mark on Veterans' understanding of who they are upon returning to the civilian environment. Clinically, practitioners could use measures of self-concept clarity and identity fusion (e.g., visual measure and/or the WIS-R) along with other screeners and assessments used for more commonly assessed areas (such as anxiety, depression) to assess a full range of functioning. Practitioners often ask about social support and if it is adequate for them, as this is

understood as a protective factor. Assessing for the novel variables could be conceptualized as a potential protective factor as well, in that it is an area that could be bolstered with military-related social supports. Time could be spent on psychoeducation regarding embracing both the fused military identity as well as relating with the parts of their civilian identity they would like to retain. This would allow for both military Servicemember, Veteran, and civilian identities to be present to varying degrees, but remain adaptive in the context of the civilian society.

The purpose of this study was to illuminate additional factors (beyond previously established ones) that ought to be considered when preparing Veterans for reintegration, as well as investigation in the relevance of the well-studied variables (e.g., PTSD). One clinical example of a way to prepare Veterans for reintegration would be through Acceptance and Commitment Therapy (ACT), as it would likely be a beneficial empirically-supported treatment for Veterans experiencing difficulty due to weak self-concept clarity and/or a strong military group identity with reintegration difficulties. Specifically, guiding the Veteran to identify both military and civilian cultural values that are important to them, and how to begin to live their life in a manner that is aligned with the values from both cultures.

A recent paper supported the idea of using ACT for reintegration of Post-9/11 Servicemembers supports the theory that some Veterans may hold the military cultural identity rigidly (Sandoz, Moyer, & Armelie, 2015). The rigidity may be problematic while reintegrating into civilian society and previously held civilian relationships. As such, utilization of ACT would promote psychological flexibility and perspective taking among others, in conjunction with identifying the Veteran's current values to guide behaviors (Sandoz, Moyer, & Armelie, 2015). Additionally, a 2011 study implemented ACT to Post-9/11 Veterans to promote healthy reintegration and did not require a diagnosed mental health condition to participate. Veterans in

the intervention group, compared to the control group, evidenced significant decreases in distress and increases in relationship satisfaction (Blevins, Roca, & Spencer, 2011).

Strengths

The study had similar numbers of males and females, which is relatively rare in regard to military-related studies. Oversampling was deemed worthwhile due to female Veterans being understudied, and this would allow comparisons between males and female Veterans. The current study was not based on, or focused on, VA data or patients. As discussed in Chapter One, Veterans who utilized the VA and those who do not are significantly different. Thus, the current study offers unique outcomes that are not focused on one domain of Veterans.

The manually coded attention checkpoints and military verification checkpoints were a strength of the current study. To be included in the sample, participants had to pass required verification points, some of which were timed (e.g., boot camp question), and also show consistency in answering questions (e.g., the same questions were asked at the beginning and end of the study). Individuals who made it past the computerized checkpoints also needed to pass the manually coded and manually verified checkpoints to be included in the overall study. In addition to the military checkpoints, subjects were also required to pass attention checks throughout the study, contributing to the overall quality of the data.

The current study findings were consistent with clinical samples in regard to the relevance of PTSD, depressive, and alcohol abuse, as well as the protective factor of social support. Thus, this study supports continued efforts at reaching Veterans in the community who are not currently utilizing services but need services. Additionally, Veterans that hold firmly to the military identity will likely be unable to be malleable to the changing cultural context (i.e., civilian society and demands). This would likely, over time, contribute to psychological

difficulties and potential social support difficulties. Thus, while various findings demonstrated extremely small effect sizes, they may be clinically relevant and in need of additional research to find additional support of this idea.

Limitations

The study was a cross-sectional correlational design that does not allow for identification of temporal relationships and identification of causality. The sample was a convenience sample of individuals who self-selected to participate in the study. There may be confounding variables present that were not accounted for in the study due to the nature of the study being online via MTurk, self-selected, and a lack of randomization. Due to a computer and internet-based platform, certain Veterans may not have had access to complete the study, which may have biased the results here.

Overall, the sample did not endorse significant difficulties with reintegration (recall a mode of 0 but did demonstrate an adequate range). As such, there may not have been sufficient reintegration difficulties to assess the variables of focus. While family-wise error corrections did not occur, this was due to the decision to identify if there were any effects present. Future studies would then be more stringent in accounting for this. Utilizing the alpha of 0.05 also resulted in inclusion of several more covariates which may have prevented identification of an effect that may have been present.

The AUDIT measure demonstrated subpar reliability (recall α of 0.68), and it was decided to drop item two “How many drinks containing alcohol do you have on a typical day when you are drinking,” which raised the alpha to an acceptable 0.75. While it is not ideal to need to modify a measure that normally has sound psychometric proprieties, it was warranted for the current study to allow for a more reliable measure. Additional limitations of this study

included potential issues with the previous military self-expansion measure and lack of assessment of other variables that may have potentially been influential in this study (see Discussion above).

Future Directions

Due to the novelty of the current study, replication studies are warranted utilizing both MTurk and alternative mechanisms to obtain subjects. Additionally, future studies may consider utilizing both the visual identity fusion pictorial measure as well as the WIS-R measure, to allow for comparison between the two. The WIS-R was utilized in the current study due to concerns regarding ceiling and floor effects that could possibly occur with the pictorial measure. In addition, Gomez, Vazquez, Buhrmester, and Jetten (2011) found that while previous studies utilizing the pictorial scale of identity fusion believed identity fusion to be a dichotomous construct (i.e., fused or not fused), their study demonstrated identity fusion is a continuous construct (i.e., a spectrum). The original dichotomous thinking was an artifact of the measure itself (Gomez, Vazquez, Buhrmester, & Jetten, 2011), another reason why it was not selected for the current study. However, it would be interesting to compare the WIS-R and the identity fusion pictorial measure to replicate the Gomez and colleagues (2011) study to verify the construct is indeed best conceptualized as continuous.

It would be useful to identify why the adapted self-expansion measure performed the way it did in the current study (largely negatively associated with other variables, unexpectedly). To start, it may be best to investigate self-expansion with the original measure with Servicemembers and Veterans, and then move to the adaptive self-expansion measure. This would ensure the measure is indeed assessing the construct it was originally designed to assess for the present tense use. Further research evaluating the relationship between retrospective military self-

expansion and self-concept clarity would provide useful insights into whether the current study findings were aberrant or a representation of the underlying association between the two constructs.

The current study included Post-9/11 combat Veterans. Future studies could include both combat and non-combat deployed Veterans to investigate the current variables among the two groups for differences, and in particular self-concept clarity and identity fusion. Comparisons between non-deployed, combat deployed, and non-combat deployed may also offer further information into identity fusion specifically. Additionally, utilization of cut scores of the measures included may allow for additional comparisons associated with the criterion variables (e.g., PCL-5 using a cut score of 33 to separate those screening positive and negative for PTSD, rather than using it as a continuous measure as done in the current study with greater scores indicating greater likelihood of PTSD screening positive).

Longitudinal studies focusing on the current variables over time would offer rich information to understanding the variables of the study (identity fusion, self-concept clarity, self-expansion), and reintegration. It would be very interesting to obtain baseline pre-deployment, during deployment, post-deployment, and at various time points after reintegration (separation from military). In particular, gathering self-expansion, self-concept clarity, and identity fusion data at pre-deployment, during deployment, post-deployment, and at various time points after reintegration. This would allow a multitude of information regarding the phases (i.e., Servicemember, deployed Servicemember, and Veteran) on these variables. Additionally, each time point could be compared to the reintegration data collected at the various points of reintegration. This would also provide information on how these constructs may change and associate with each other over time. Obtaining this information would allow for modifications of

reintegration programs, as well as interventions that could be tailored for the difficulties or strengths identified at various timepoints. Additionally, this may allow preventative measures if it is better understood how the constructs change over time (if at all).

While exploratory analyses investigated self-concept clarity as a mediator between identity fusion and reintegration difficulties, future studies could replicate the study to investigate if this finding holds. It would be interesting to investigate current self-concept clarity in relation to current identity fusion and reintegration difficulties, as well as self-concept clarity and identity fusion while in the military and how that relates to current reintegration difficulties. This would allow evaluation of changes over time, and possibly additional insight into the experiences of Veterans.

The current sample of Post-9/11 Veterans endorsed relatively low reintegration difficulties. Future studies could focus on a broader range of reintegration difficulties of Post-9/11 Veterans. It is unclear if this was a product of the recruitment method being the MTurk platform, or if it just happened that the sample was of Veterans not having many reintegration difficulties overall. In relation with this, it would be interesting to use the M2C-Q measure to compare results for Post-9/11 Veterans obtained from MTurk and Post-9/11 Veterans who are recruited from another avenue such as other online sources. This may offer insight into whether the Post-9/11 Veterans were unique on the MTurk platform in relation to reintegration difficulties. Future studies could collect information regarding services utilized (e.g., VA, Vet Centers, community medical centers, community clinics) to control for the variance accounted for by these potential differences. Lastly, future studies could focus on Post-9/11 Veterans who endorse all levels of reintegration difficulties including high reintegration difficulties. Levels of reintegration difficulties were generally low in the current study which made the results difficult

to interpret and generalize. Obtaining data on the full range of reintegration difficulties including high levels of reintegration difficulties would allow for a clearer picture of what is occurring among the variables described in the current study.

In regards to identity fusion, the multiple timepoints again could allow for information regarding identity fusion during service (or retrospectively after service), identifying any changes in identity fusion over time. Similarly, future studies should look at some of the factors that might influence fusion and de-fusion. Studies focusing on fusion and individuals' attempts at avoiding de-fusion, such as re-enlistment that was discussed by Swann and colleagues (2012). It would also be informative to identify ways in which de-fusion may occur for Veterans, and when this may occur, and what that is like for the Veteran.

Evaluation of the variables included in the current study over time would also allow for validation of previous military self-expansion as an adapted measure for use in the military. While the alpha was good for the previous military self-expansion measure, it was unclear whether we were truly tapping into previous self-expansion based on the unique and unexpected results described above. Additional research is needed on the adapted for military measure that focuses on retrospective self-expansion, as well as further research on current military self-expansion. In addition, future studies would be able to evaluate self-concept clarity while the Veterans were in the military as Servicemembers to test some of the speculation we discussed in the discussion section.

Conclusion

In conclusion, reintegration is a complex process. It is unique to each individual Veteran and may impact the Veterans overall wellbeing. While not all Veterans will struggle with reintegration, and it will vary in severity among those that do, it is an important area to better

understand. This was the first study, to our knowledge, to investigate previous military self-expansion, current self-concept clarity, and identity fusion, in relation to reintegration difficulties of Post-9/11 combat Veterans. Overall, the study identified additional areas of study that go above and beyond currently well-known variables that may complicate reintegration for Veterans. For newly transitioning Veterans and clinicians, the current study suggests that self-concept clarity and fusion are worthy of discussion as Veterans prepare to reintegrate into civilian life. Additional future research will allow us to more fully understand identity fusion, self-concept clarity, and reintegration of Veterans and how to optimize reintegration programs and treatment to promote the overall health of Veterans long-term.

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Appendix A

Pilot study HIT

MTurk Job Description: This survey will include questions to assess your experiences and perceptions when in the military and after separation. It will take approximately 25 to 35 minutes on average but may take up to 60 minutes depending on the worker. You must have been in the United States Military previously, served in the post-9/11 era, and deployed at least once. There will be military checkpoint to verify you were in the military and are now currently separated.

Length: Up to 60 minutes

Qualifications Required: 18 years of age, be a military Veteran of the post 9/11 period, been deployed to a combat zone, be a current resident of the United States. Depending on the HIT, subjects were also required to be biologically male or female. Note: You must meet the requirements to participate in the study. If you do not meet these requirements you will not be compensated for your work which may lower your approval rating.

Exclusion: May not participate in both the Pilot study and Full Launch of this study. Must meet study criteria outlined in HIT and Informed Consent Form.

Reward: \$1.50

Appendix B

Full Launch HIT

MTurk Job Description: This survey will include questions to assess your experiences and perceptions when in the military and after separation. It will take approximately 25 to 35 minutes on average but may take up to 60 minutes depending on the worker. You must have been in the United States Military previously, served in the post-9/11 era, and deployed at least once. There will be military checkpoint to verify you were in the military and are now currently separated. If you completed the Post-Military Outcomes 2017 Pilot, you do not qualify for this study.

Length: Up to 60 minutes

Qualifications Required: 18 years of age, be a military Veteran of the post 9/11 period, been deployed to a combat zone, be a current resident of the United States. Depending on the HIT, subjects were also required to be biologically male or female. Note: You must meet the requirements to participate in the study. If you do not meet these requirements you will not be compensated for your work which may lower your approval rating.

Exclusion: May not participate in both the Pilot study and Full Launch of this study. Must meet study criteria outlined in HIT and Informed Consent Form.

Reward: \$1.50

Appendix C Informed Consent Form

Study Name: Post-Deployment Outcomes 2017

Principal Investigator: Samantha Tupy, M.A.

Faculty Supervisor: Xiaomeng Xu, Ph.D.

Feel Free to Print a Copy of This Form for Your Records

What is the purpose of this study?

We want to learn more about Veteran perceptions and understanding of themselves after serving in the military and experiencing at least one deployment. We are asking people like you who are at least 18 years old and are a military Veteran from the post 9/11 period to help us.

Who can participate in this study?

Individuals who are a current United States resident or green card permanent resident. You must be at least 18 years old, and a current Veteran who served in the United States military from the Post-9/11 period (September 11, 2001 and after). You must have been deployed to at least one combat area during your service.

- **Post-9/11 Veteran:** any person who served for any length of time in any military service branch from September 11, 2001 and after
- **Combat deployment:** ordered to foreign soil or water to participate in any direct or support activity against any enemy. A Veteran who experienced any level of hostility for any duration resulting from offensive, defensive, or friendly fire military action involving a real or perceived enemy in any pre- or post-designated theater or combat operations.
- **Current Veteran:** here, current Veteran is defined as an individual who is separated from the military (e.g., end of contract, retired, and so forth).

What happens if I say yes, I want to be in the study?

If you decide to participate, you will:

- Read this informed consent in full.
- Understand and agree to the requirements of the study by clicking “I Agree” after reading over the consent.
- You will then be able to move into the study content in which you will respond to various questionnaires.
- Upon completion of the study, you will enter a unique code provided to you into MTurk to allow for payment.
- It is highly advised to not use a cell phone to complete this survey to avoid glitches.

How long will it take for me to complete the study?

The study may take up to 60 minutes to complete online, depending on the unique person completing the survey. **This survey needs to be completed in one-time frame. Therefore, please take the time to answer the questions in a quiet, disturbance free environment (some sections will be timed).**

How will I be compensated for my participation?

You will be compensated \$1.50 for your participation based on recent MTurk studies regarding appropriate compensation for up to an hour of your time. When you exit the survey and submit your task completion code via MTurk you will receive notice of payment from MTurk within 5 business days.

What happens if I say no, I do not want to be in the study?

No one will treat you any differently. You will not be penalized.

What happens if I say yes, but change my mind later?

You may stop being in the study at any time. You will still receive reimbursement for your time when you have begun the questionnaire portion of the survey (once you have started the questionnaire portion of the survey after the initial edibility questions and verification checkpoints at the beginning of the study). It is important to note that providing incomplete data may negatively impact your MTurk HIT acceptance rate. There is a withdrawal option at the end of every page. If selected, you will be brought to the end of the survey and given your code for the reimbursement of your time (once you have started the questionnaire portion of the survey after the initial edibility questions and verification checkpoints at the beginning of the study).

Who will see my information?

The only people who will see your answers will be the primary investigator, the faculty supervisor, and potentially individuals on the study support team. However, your answers will be confidential and will not be tied to you. Therefore, your answers will not be linked to any identifiers of you. All data provided to us will be collected in an external survey system and your answers will not be accessible to MTurk. When results are shared at conferences and in professional journals, we will not have identifying information, nor would we include that information if we had access to it.

Will being in this study help me in any way?

Participating in the study will contribute to a better understanding of military Veterans' experiences and reintegration into civilian society.

What are the risks of participating in the study?

Some questions may make you feel uncomfortable. Remember that you may stop this study at any time.

What if I have questions?

Please contact the principle investigator, Samantha Tupy, at tupysama@isu.edu if you have any questions about the study or your participation.

Consent to Participate (check each item in this list if you agree with the statement about you):

- ☐ I have read, understand, and agree to the above information.
- ☐ I agree to participate in this study with the understanding that I may choose not to participate or may stop at any time, however this may influence MTurk outcomes.
- ☐ I verify that I am at least 18 years old.
- ☐ I verify that I am a Veteran from the Post-9/11 period and am no longer active, in the reserves, or in the national guard (i.e., I am separated from the military).
- ☐ I verify that I have at least ONE combat deployment.
- ☐ I verify that I am a united states resident or legal permanent resident of the United States.

If you agree to participate select “I Agree” below to continue with the study. If you choose not to participate please select “Exit,” and then the next page button to exit the study and you will be guided back to the MTurk website.

Thank you for your time and consideration.

- ☐ I Agree
- ☐ Exit

Welcome to the study! Survey directions: Please read the instruction for each new task before beginning to ensure you are answering the questions as you have intended. We hope that you will answer the questions completely and honestly. This survey may take up to 60 minutes to complete. Please take this survey in a quiet environment where you are able to concentrate and finish the entire survey in one sitting. Thank you.

Appendix D

Military Verification Screening (MIS)

Veterans were asked to indicate which branch of the military they served in and then were directed to the correct branch identified with to then correctly rank the military emblems associated with their identified branch from most junior to most senior. There were four emblems given for each branch, and each was timed. The examples are below.

- Please put these **Air Force** enlisted ranks in order, from most junior to most senior rank, by moving the images:



- Please put these **Army** enlisted ranks in order, from most junior to most senior rank, by moving the images:



- Please put these **Coast Guard** enlisted ranks in order, from most junior to most senior rank, by moving the images:



- Please put these **Marine Corps** enlisted ranks in order, from most junior to most senior rank, by moving the images:



- Please put these **Navy** enlisted ranks in order, from most junior to most senior rank, by moving the images:



Appendix E

SDS-17

Instructions. Below you will find a list of statements. Please read each statement carefully and decide if that statement describes you or not. If it describes you, select the word "true"; if not, select the word "false".

1. I sometimes litter	True	False
2. I always admit my mistakes openly and face the potential negative consequences.	True	False
3. In traffic I am always polite and considerate of others.	True	False
4. I always accept others' opinions, even when they don't agree with my own.	True	False
5. I take out my bad moods on others now and then.	True	False
6. There has been an occasion when I took advantage of someone else.	True	False
7. In conversations I always listen attentively and let others finish their sentences.	True	False
8. I never hesitate to help someone in case of emergency.	True	False
9. When I have made a promise, I keep it – no ifs, ands, or buts.	True	False
10. I occasionally speak badly of others behind their back.	True	False
11. I would never live off at other people's expense.	True	False
12. I always stay friendly and courteous with other people, even when I am stressed out.	True	False
13. During arguments I always stay objective and matter-of-fact.	True	False
14. There has been at least one occasion when I failed to return an item that I borrowed.	True	False
15. I always eat a healthy diet.	True	False
16. Sometimes I only help because I expect something in return.	True	False

Appendix F WIS-R

This questionnaire measures people's views on being a Veteran (or being in the military). There are no correct answers, please just answer as honestly as possible. Please answer according to the following scale:

	Agree Strongly (1)	Agree (2)	Disagree (3)	Disagree Strongly (4)
1. I am happy that I am a Veteran.				
2. I feel good about my military service.				
3. I am proud of the things that Veterans have accomplished.				
4. I believe that I have many strengths due to my military service.				
5. I often regret my military service.				
6. I am proud to have served in the military.				
7. I am ashamed of my military service.				
8. Only other Veterans can truly understand me.				
9. When I meet other Veterans I can trust them more quickly than other people.				
10. I become friends with other Veterans more quickly than with non-Veterans.				
11. My fate and future are bound up with that of Veterans.				
12. Regarding other Veterans, it is accurate to say, "United we stand, divided we fall."				
13. The most important things that have happened in my life involve my military service.				
14. When I talk about the military, I usually say 'we' rather than 'they.'				
15. During my time within my unit in the military I always felt like an outsider.				
16. I never felt emotionally connected to my military unit.				
17. Throughout my time in the military I resisted believing in military rituals and norms.				
18. I miss my military friends.				
19. I wish I could go back into the military.				
20. By leaving the military I lost a family.				
21. Overall, having served in the military has very little to do with how I feel about myself.				
22. In general, being a Veteran is an important part of my self-image.				

23. Being a Veteran is unimportant to my sense of what kind of person I am.				
24. Being a Veteran is not a major factor in my social relationships.				
25. Overall, Veterans are highly thought of.				
26. In general, others respect Veterans and members of the military.				
27. In general, other groups view Veterans in a positive manner.				
28. Society views Veterans as an asset.				
29. I appreciate the skills I learned in the military.				
30. The work I do at home has more meaning for me than the work I did for the military.				
31. I miss the job-related aspects of my time in the military.				

Appendix G

M2C-Q

Over the past 30 days, have you had difficulty with...	No difficulty (0)	A little difficulty (1)	Some difficulty (2)	A lot of difficulty (3)	Extreme difficulty (4)
1. Dealing with people you do not know well (such as acquaintances or strangers)?					
2. Making new friends?					
3. Keeping up friendships with people who have no military experience?					
Keeping up friendships with people who have military experiences (including friends who are active duty or Veterans)?					
5. Getting along with relatives (such as siblings, parents, grandparents, in-laws, and children not living at home)?					
6. Getting along with your spouse or partner (such as communicating, doing things together, enjoying his or her company)?					
7. Getting along with your child or children (such as communicating, doing things together, enjoying his or her company)?					
8. Finding or keeping a job (paid or unpaid or self-employment)?					
9. Doing what you need to do for work or school?					
10. Taking care of your chores at home (such as housework, yard work, cooking, cleaning, shopping, errands)?					
11. Taking care of your health (such as exercising, sleeping, bathing, eating well, taking medications as needed)?					
12. Enjoying or making good use of free time?					
13. Taking part in community events or celebrations (for example, festivals, PTA meetings, religious or other activities)?					
14. Feeling like you belong in “civilian” society?					
15. Confiding or sharing personal thoughts and feelings?					
16. Finding meaning or purpose in life?					

Appendix H

SCC

	Strongly Disagree (1)	Agree (2)	Neutra l (3)	Disagree (4)	Strongl y Agree (5)
1. My beliefs about myself often conflict with one another					
2. On one day I might have one opinion of myself and on another day I may have a different opinion					
3. I spend a lot of time wondering about what kind of person I really am					
4. Sometimes I feel that I am not really the person I have been in the past, I'm not what I was really like					
5. When I think about the kind of person I have been in the past, I'm not sure what I was really like					
6. I seldom experience conflict between the different aspects of my personality					
7. Sometimes I think I know other people better than I know myself					
8. My beliefs about myself seem to change very frequently					
9. If I were asked to described my personality, my description might end up being different from one day to another day					
10. Even if I wanted to, I don't think I could tell someone what I'm really like					
11. In general, I have a clear sense of who I am and what I am					
12. It is often hard for me to make up my mind about things because I don't really know what I want					

Appendix I

W-SEQ Adapted

Answer each question according to how you felt about your military job, using the scale provided.

	Not Very Much (1)	(2)	(3)	(4)	(5)	(6)	Very Much (7)
1. How much did working with the military result in having new experiences?							
2. When you were in the military, did you feel a greater awareness of things because of your job?							
3. How much did your job in the military increase your ability to accomplish new things?							
4. How much did your military job make you more appealing to other potential jobs?							
5. How much did your military job help to expand your sense of the kind of person you are?							
6. How much did you see your military job as a way to expand your own capabilities?							
7. Did you often learn new things about your military job?							
8. How much was your military job a source of exciting experiences?							
9. How much did working at your military job allow you to compensate for some of your own weaknesses as a person?							
10. How much did you feel that you had a larger perspective on things because of your military job?							
11. How much did working at your military job result in your learning of new things?							
12. How much had working at your military job make you a better person?							
13. How much did working at your military job increase the respect other people had for you?							
14. How much did your military job increase your knowledge?							

Appendix J PDSS

	Strongly Disagree (1)	Somewhat Disagree (2)	Neither Agree nor Disagree (3)	Somewhat Agree (4)	Strongly Agree (5)
1. The American people made me feel at home when I returned					
2. When I returned, people made me feel proud to have served my country in the Armed Forces					
3. My family members and/or friends make me feel better when I am down					
4. I can go to family members or friends when I need good advice					
5. My family and friends understand what I have been through in the Armed Forces					
6. There are family and/or friends with whom I can talk about my deployment experiences					
7. My family members or friends would lend me money if I needed it					
8. My family members or friends would help me move my belongings if I needed help					
9. If I were unable to attend to daily chores, there is someone who would help me with these tasks					
10. When I am ill, family members or friends will help out until I am well					

Appendix K

DDRI-2

The statements below are about your combat experiences during your most recent deployment. As used in the statements, the term “unit” refers to those you lived and worked with on a daily basis during deployment. Please mark how often you experienced each circumstance.

While deployed...	Never (1)	Once or Twice (2)	Several times over entire deployment (3)	A few times each month (4)	A few times each week (5)	Daily or almost daily (6)
1. ...I went on combat patrols or missions						
2. ...I took part in an assault on entrenched or fortified positions that involved naval and/or land forces						
3. ...I personally witnessed someone from my unit or an ally unit being seriously wounded or killed						
4. ...I encountered land or water mines, booby traps, or roadside bombs (e.g., IEDs)						
5. ...I was exposed to hostile incoming fire						
6. ...I was exposed to “friendly” incoming fire						
7. ...I was in a vehicle (e.g., “humvee,” helicopter, boat) or part of a convoy that was attacked						
8. ...I was part of a land or naval artillery unit that fired on enemy combatants						
9. ...I personally witnessed enemy combatants being seriously wounded or killed						
10. ...I personally witnessed civilians (e.g., women, children) being seriously wounded or killed						
11. ...I was injured in a combat-related incident						
12. ...I fired my weapon at enemy combatants						
13. ...I think I wounded or killed someone during combat operations						
14. ...I was involved in locating or disarming explosive devices						
15. ...I was involved in searching or clearing homes, buildings, or other locations						
16. ...I participated in hand-to-hand combat						
17. ...I was involved in searching and/or disarming potential enemy combatants						

Appendix L

PCL-5

Instructions: this questionnaire asks about problems you may have had after a very stressful experience involving actual or threatened death, serious injury, or sexual violence. It could be something that happened to you directly, something you witnessed, or something you learned happened to a close family member or close friend. Some examples are a serious accident; fire; disaster such as a hurricane, tornado, or earthquake; physical or sexual attack or abuse; war; homicide; or suicide.

First, please answer a few questions about your worst event, which for this questionnaire means the event that currently bothers you the most. This could be one of the examples above or some other very stressful experience. Also, it could be a single event (for example, a car crash) or multiple similar events (for example, multiple stressful events in a war-zone or repeated sexual abuse).

Briefly identify the worst event (if you feel comfortable doing so): _____

How long ago did it happen? _____ (please estimate if you are not sure)

Did it involve actual or threatened death, serious injury, or sexual violence?

_____ yes

_____ no

How did you experience it?

_____ it happened to me directly

_____ I witnessed it

_____ I learned about it happening to a close family member or close friend

_____ I was repeatedly exposed to details about it as part of my job (for example, paramedic, police, military, or other first responder)

If the event involved the death of a close family member or close friend was it due to some kind of accident or violence, or was it due to natural causes?

_____ accident or violence

_____ natural causes

_____ not applicable (the event did not involve the death of a close family member or close friend)

Second, keeping this worse event in mind, read each of the problems below and select one of the options to indicate how much you have been bothered by that problem in the past month.

In the past month, how much were you bothered by:	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
1. Repeated, disturbing, and unwanted memories of the stressful experience?					
2. Repeated, disturbing dreams of the stressful experience?					
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?					

4. Feeling very upset when something reminded you of the stressful experience?					
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating?)					
6. Avoiding memories, thoughts, or feelings related to the stressful experience?					
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?					
8. Trouble remembering important parts of the stressful experience?					
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?					
10. Blaming yourself or someone else for the stressful experiences or what happened after it?					
11. Having strong negative feels such as fear, horror, anger, guilt, or shame?					
12. Loss of interest in activities that you used to enjoy?					
13. Feeling distant or cut off from other people?					
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or having loving feelings for people close to you)?					
15. Irritable behavior, angry outbursts, or acting aggressively?					
16. Taking too many risks or doing things that could cause you harm?					
17. Being “super alert” or watchful or on guard”?					
18. Feeling jumpy or easily startled?					
19. Having difficulty concentrating?					
20. Trouble falling or staying asleep?					

Appendix M
CESD-10

	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	All of the time (5-7 days)
1. I was bothered by things that usually don't bother me				
2. I had trouble keeping my mind on what I was doing				
3. I felt depressed				
4. I felt that everything I did was an effort				
5. I felt hopeful about the future				
6. I felt fearful				
7. My sleep was restless				
8. I was happy				
9. I felt lonely				
10. I could not "get going"				

Appendix N

AUDIT

Please select the answer that is correct for you

1. How often do you have a drink containing alcohol?	Never (0)	Monthly or less (1)	Two to four times a month (2)	Two to three times per week (3)	Four or more times a week (4)
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2 (0)	3 or 4 (1)	5 or 6 (2)	7 to 9 (3)	10 or more (4)
3. How often do you have six or more drinks on one occasion?	Never (0)	Less than monthly (1)	Monthly (2)	Weekly (3)	Daily or almost daily (4)
4. During the past year, how often have you found that you were not able to stop drinking once you had started?	Never (0)	Less than monthly (1)	Monthly (2)	Weekly (3)	Daily or almost daily (4)
5. During the past year, how often have you failed to do what was normally expected of you because of drinking?	Never (0)	Less than monthly (1)	Monthly (2)	Weekly (3)	Daily or almost daily (4)
6. During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?	Never (0)	Less than monthly (1)	Monthly (2)	Weekly (3)	Daily or almost daily (4)
7. During the past year, how often have you had a feeling of guilt or remorse after drinking?	Never (0)	Less than monthly (1)	Monthly (2)	Weekly (3)	Daily or almost daily (4)
8. During the past year, have you been unable to remember what happened the night before because you had been drinking?	Never (0)	Less than monthly (1)	Monthly (2)	Weekly (3)	Daily or almost daily (4)
9. Have you or someone else been injured as a result of your drinking?	No (0)		Yes, but not during the past year (2)		Yes, during the past year (4)
10. Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?	No (0)		Yes, but not in the past year (2)		Yes, during the past year (4)

Appendix O

Civilian Demographics

(Note: questions below with a * indicates questions asked at the beginning of the study and repeated at the end of the study to check for consistent responding)

What is your age in years?* _____

What is your biological sex?

- Male
- Female
- Other

What is your gender identity? _____

What is your individual income?

- Under \$10,000
- \$11,000 - \$20,000
- \$21,000 - 40,0000
- \$41,000 - \$60,000
- \$61,000 - \$80,000
- \$81,000 - \$100,000
- Over \$100,000
- Prefer not to disclose

Please indicate your relationship status:

- Legally Single
- Married
- Divorced
- Separated
- Remarried
- Widowed
- Living with significant other

If you marked “single” above, are you currently in a relationship (i.e., dating)?

- Yes
- No

Racial or Ethnic Category, please select all that apply to you:

- American Indian/Alaskan Native

- Asian American
- African-American/Black
- Asian/Pacific-Islander
- European American/Caucasian/White
- Hispanic American/Latino
- Other _____

If you selected “Other” or endorsed multiple racial categories above, please input what you identify with _____

Appendix P Military Demographics

(Note: questions below with a * indicates questions asked at the beginning of the study and repeated at the end of the study to check for consistent responding)

How long was your basic training or boot camp (in weeks, NOT including indoctrination, Advanced Individual Training, or advanced training for certain specialties after basic training)?*

Have you ever been deployed to a combat area?*

- Yes
- No

Have you been deployed more than once? If yes, please input the number of deployments

- Yes _____
- No

What was the location of your deployment(s), list all?

What was your highest rank in the military?*

Are you currently in active duty (i.e., do not hold Veteran status)?*

- Yes
- No

Have you been diagnosed with a *moderate* or *severe* traumatic brain injury (TBI)?

- Yes
- No

During any of your deployments, were you injured from any of the following: fragment/shrapnel wound above the shoulder, vehicular accident or crash (any type of vehicle, including airplanes), fall, blast/explosion (improvised explosive device, RPG, land mine, grenade, mortar, artillery, etc), other type of blow to the head, *and* Did any injury you received while deployed result in any of the following immediately afterwards: Being dazed, confused, or “seeing stars”; not remembering the event; losing consciousness; head injury or concussion?

- Yes
- No

How long was your service in the military?*

_____ years and _____ months

How long was your longest deployment?

_____ years and/or _____ months

How long ago did you separate from the military?*

_____ years and _____ months

How long ago did you return from your most recent deployment?

_____ years _____ months

In what branch of the military did you serve?*

- Air Force
- Army
- Coast Guard
- Marine Corps
- Navy
- Reserves

Appendix Q

Study Debriefing

The study you have just completed was designed to investigate the experiences of Post 9/11 combat Veterans and to help us better understand the reintegration process.

Some of the questions in this survey may have been difficult, and your generosity and willingness to participate in this study are greatly appreciated. If answering any of these questions led you to feel distressed and you would like to speak to someone about your thoughts, please contact your community support systems (community health care, community hospitals, VA Medical Centers, VA Hospitals), or call the numbers provided below (feel free to share these resources with others). If you feel you are in immediate danger, call 911.

Veterans Crisis Line:

Phone: 1-800-273-8255, press 1

Text: 838255

Chat online:

<https://www.veteranscrisisline.net/SignsOfCrisis/?gclid=CPH1yNuRz9ICFQSRfgodfd0BPg>

Vet to Vet Assistance

Call: 1-800-777-4443

National Suicide Prevention Lifeline

Phone: 1-800-273-8255

Web: <https://suicidepreventionlifeline.org/help-yourself/veterans/>

Thank you for your participation and for not discussing the contents of the study with other Veteran Mturk workers. If you have any questions about the study, please feel free to contact Samantha Tupy [tupysama@isu.edu] or Dr. Xiaomeng (Mona) Xu [xuxiao@isu.edu]. If you would like to obtain a copy of the results of this study once it is complete, please contact Samantha Tupy.

DO NOT FORGET TO:

Record the unique survey completion code that will be shown after this page. If you were screened out in the military checkpoints (not eligible for this study) or withdrew before the questionnaire portion began (withdrew during military checkpoint portion0 there will be no randomized code presented (a space will be present).

Return to the MTurk window to enter the survey completion code to submit your task and earn compensation.

Thank you for serving our country, for your sacrifices, and for your contribution to this study to help Veterans!

Appendix R

Exploratory Analyses Hypothesis 1

An exploratory analysis was conducted to evaluate if previous military self-expansion was indeed a significant predictor of reintegration difficulties (when no covariates were present), with each block thereafter evaluating if it remained significant as covariates were added individually in models following based on beta weights of the previous regression analysis. The initial model (Model 1) included WSEQ as the sole predictor of M2C-Q, this was statistically significant ($F(1, 532) = 39.90, p < 0.05$), with the predictor variable previous military self-expansion (WSEQ) explaining 7% (adjusted R square = 0.06) of reintegration difficulties, a negligible effect size (Field, 2009).

The second model (Model 2) included socially desirable responding (SDS-17), the model remained significant ($F(2, 531) = 27.75, p < 0.05$), with the predictors previous military self-expansion and socially desirable responding explaining 9% (adjusted R Square = 0.08) of reintegration difficulties. When socially desirable responding was added to the model in Model 2, it provided a statistically significant increase in R square of 0.02, ($F(1, 531) = 14.58, p < 0.05$).

Finally, a third block (Model 3) involved the addition of post-deployment social support (PDSS), which was statistically significant ($F(3, 530) = 45.56, p < 0.05$), with previous military self-expansion, socially desirable responding, and post-deployment social support explaining 20% (adjusted R Square = 0.19) of reintegration difficulties. When post-deployment social support was added it provided a statistically significant increase in R square of 0.11, ($F(1, 530) = 73.58, p < 0.05$). The covariate entry was halted at three blocks due to the addition of post-deployment social support resulting in previous military self-expansion no longer being a

significant predictor of reintegration difficulties (see Table 19). More specifically, the addition of the post-deployment social support (PDSS) variable accounted for a large portion of variance that was initially accounted for by previous military self-expansion (WSEQ).

Table 19

Sequential Multiple Regression Predicting M2C-Q from WSEQ, SDS-17, and PDSS.

	<i>Model 1</i>			<i>Model 2</i>			<i>Model 3</i>		
Variable	<i>B</i>	<i>SE_B</i>	<i>p-value</i>	<i>B</i>	<i>SE_B</i>	<i>p-value</i>	<i>B</i>	<i>SE_B</i>	<i>p-value</i>
Constant	36.57*	2.80	0.001	40.18*	2.92	0.001	53.59*	3.1	0.001
WSEQ	-0.25*	0.04	0.001	-0.23*	0.04	0.001	-0.07	0.04	0.062
SDS				-0.60*	0.15	0.001	-0.54*	0.14	0.001
PDSS							-0.65*	0.07	0.001
<i>R</i> ²	0.07			0.09			0.20		
<i>F</i>	39.90*			27.75*			45.56*		
ΔR^2	0.07			0.02			0.11		
ΔF	39.90*			14.58*			73.58*		

Note: *significant at $p < 0.05$; *B* = unstandardized regression coefficient; *SE_B* = standard error of the coefficient.

Exploratory analyses were conducted to determine if previous military self-expansion was a significant predictor of reintegration difficulties but may be accounted for by additional common variables included in the original analyses. As such, previous military self-expansion was identified to be a significant predictor of less reintegration difficulties, which was opposite of what was expected. Previous military self-expansion did remain a significant predictor, albeit in the opposite direction of what was hypothesized, after the addition of socially desirable responding, but became non-significant upon the addition of post-deployment social support.

Appendix S

Exploratory Analyses Hypothesis 6 Part I

An exploratory regression analysis was conducted to evaluate if identity fusion was a significant predictor of self-concept clarity. First identity fusion (WIS-R) was run in the first model (Model 1), and was a significant predictor of self-concept clarity (SCC), ($F(1, 532) = 8.639, p < 0.05$), with identity fusion (WIS-R) explaining 1.60% (adjusted R square = 0.01) of self-concept clarity, a negligible effect size (Field, 2009).

In addition to identity fusion (WIS-R), the second model (Model 2) included socially desirable responding (SDS-17), biological sex, length of military service, and income over \$81,000, the model remained significant ($F(5, 528) = 6.91, p < 0.05$), with the predictors explaining 6% of self-concept clarity (adjusted R square = 0.05). When SDS-17, biological sex, length of military service, and income over \$81,000 were added in Model 2, it provided a statistically significant increase in R square of 0.03, ($F(4, 528) = 6.39, p < 0.05$). With the inclusion of covariates, identity fusion remained a significant predictor of self-concept clarity (see Table 20).

Table 20
Sequential Multiple Regression Predicting SCC from WIS-R, SDS-17, length of service, and Over 80k.

	<i>Model 1</i>			<i>Model 2</i>		
Variable	<i>B</i>	<i>SE_B</i>	<i>p-value</i>	<i>B</i>	<i>SE_B</i>	<i>p-value</i>
Constant	27.77*	2.08	0.001	36.84*	2.93	0.001
WIS-R	0.09*	0.03	0.003	0.06*	0.03	0.047
SDS-17				-0.36*	0.11	0.001
Biological sex				-1.82*	0.87	0.038
Length of service				-0.14*	0.08	0.087
Over 81k				-4.82*	2.06	0.020
<i>R</i> ²	0.01			0.06		
<i>F</i>	8.63*			6.91*		
ΔR^2	0.01			0.04		
ΔF	8.63*			6.39*		

Note: *significant at $p < 0.05$; B = unstandardized regression coefficient; SE_B = standard error of the coefficient.

Exploratory analyses were conducted to determine if identity fusion was a significant predictor of self-concept clarity. Greater identity fusion was indeed a significant (but negligible) predictor of greater self-concept clarity. Thus, the speculation regarding the relationship between identity fusion and self-concept clarity among Post-9/11 Veterans as discussed in the Discussion section of Hypothesis 6 was supported here, although the effect size was extremely small.

Appendix T

Exploratory Analyses Hypothesis 6 Part II

An exploratory mediation analysis was conducted to evaluate if self-concept clarity mediated the relationship between identity fusion and reintegration difficulties as discussed as a possibility in the Discussion section in Hypothesis 6. First, the PROCESS extension in SPSS was used to evaluate if self-concept clarity (SCC) mediated the relationship between identity fusion (WIS-R) and reintegration difficulties (M2C-Q) with no covariates added to the model. This was done to determine if there was a relationship between these variables, and a second mediation was completed (see below) to determine if the findings here remained after covariates were included. The overall model summary indicated the predictor identity fusion, potential mediator self-concept clarity (SCC), accounted for 29% of the total variance (adjusted R square = 0.28) a small to medium effect size (Field, 2009), ($F(2, 531) = 113.44, p < 0.05$).

The results of the analysis (Model 1, without covariates) indicated that the *c* path, the predictive association between identity fusion and reintegration difficulties, was statistically significant (WIS-R; $B = 0.32, p < 0.05$). The *a* path, the predictive association between identity fusion and self-concept clarity (WIS-R; $B = 0.09, p < 0.05$), and the *b* path was the predictive association between self-concept clarity and reintegration difficulties (SCC; $B = 0.66, p < 0.05$), with both remaining significant predictors when the *c'* path identity fusion ($B = 0.25, p < 0.05$) was included in the model. See Table 21 for full details of the analysis. The bias-corrected bootstrap confidence intervals indicated that self-concept clarity (SCC) significantly mediated the relationship between identity fusion (WIS-R) and reintegration difficulties (M2C-Q). As such, there was a significant indirect effect ($a*b$) of identity fusion (WIS-R) on reintegration difficulties (M2C-Q) through self-concept clarity (SCC) $ab = 0.06, BC\ CI [0.0174, 0.1092]$. See

Figure 12 below for a visual representation of the mediation. The completely standardized indirect effect of identity fusion (WIS-R) on reintegration difficulties (M2C-Q) was 0.05, with bootstrapping *SE* of 0.02, and a *BC CI* [0.0157, 0.1009].

Table 21

PROCESS extension predicting M2CQ from SCC and WIS-R.

Variable	<i>B</i>	<i>SE_B</i>	<i>p-value</i>
Constant	-18.84*	2.88	0.001
WIS-R	0.25*	0.04	0.001
SCC	0.66*	0.05	0.001

Note: *significant at $p < 0.05$; *B* = unstandardized regression coefficient; *SE_B* = standard error of the coefficient.

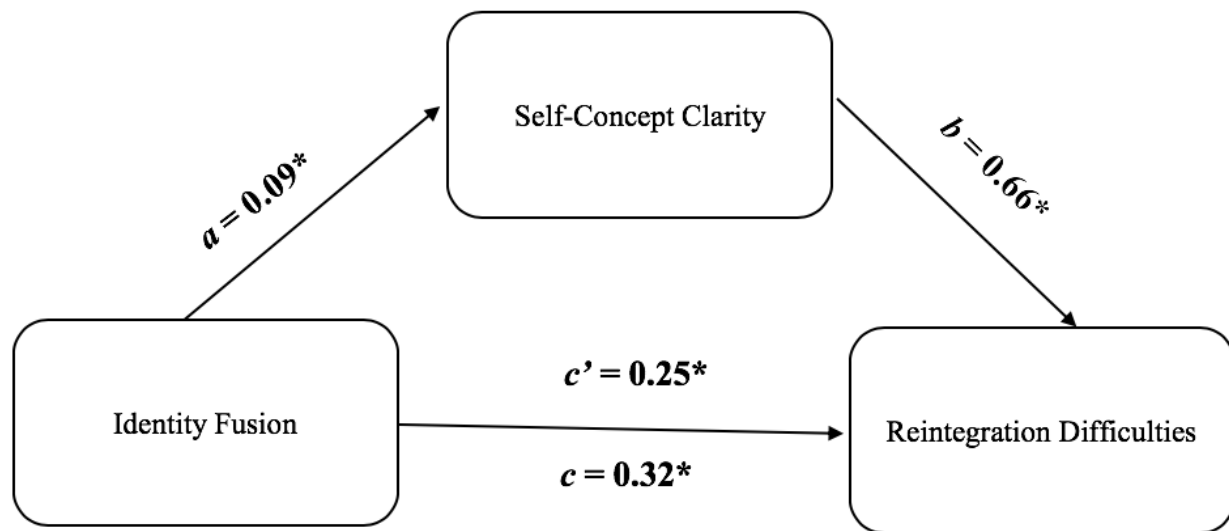


Figure 12. Visual representation of the exploratory mediation analysis with self-concept clarity without covariates, *significant at the $p < 0.05$ level

The PROCESS extension in SPSS was used to evaluate if self-concept clarity (SCC) mediated the relationship between identity fusion (WIS-R) and reintegration difficulties (M2C-Q) when including covariates (Model 2). The overall model summary indicated the predictor identity fusion, potential mediator self-concept clarity, and the covariates social desirability

(SDS-17), biological sex, combat (DDRI-2), post-traumatic stress disorder symptoms (PCL-5), depression symptoms (CESD-10), post-deployment social support (PDSS), Other racial category, length of service, and income over \$81,000, accounted for 56% of the total variance (adjusted R square = 0.55) a large effect (Field, 2009), ($F(11, 504) = 59.15, p < 0.05$).

The results of the analysis indicated that the c path, the predictive association between identity fusion and reintegration difficulties, was statistically significant (WIS-R; $B = 0.11, p < 0.05$). The a path, the predictive association between identity fusion and self-concept clarity (WIS-R; $B = -0.01, p = 0.74$), and the b path was the predictive association between self-concept clarity and reintegration difficulties (SCC; $B = 0.31, p < .05$), with both remaining significant predictors when the c' path identity fusion ($B = 0.11, p < 0.05$) was included in the model. See Table 22 for full details of the analysis. The bias-corrected bootstrap confidence intervals indicated that self-concept clarity (SCC) did not significantly mediated the relationship between identity fusion (WIS-R) and reintegration difficulties (M2C-Q). As such, there was not a significant indirect effect ($a*b$) of identity fusion (WIS-R) on reintegration difficulties (M2C-Q) through self-concept clarity (SCC) $ab = -0.003$, BC CI [-0.0259, 0.0188]. See Figure 13 below for a visual representation of the mediation. The completely standardized indirect effect of identity fusion (WIS-R) on reintegration difficulties (M2C-Q) is -0.003, with bootstrapping SE of 0.01, and a BC CI [-0.0234, -0.0176].

Table 22

PROCESS extension predicting M2CQ from SDS-17, Biological sex, DDRI-2, PCL-5, CESD-10, PDSS, Other racial category, length of service, Over 81k, SCC, and WIS-R.

Variable	B	SE_B	p -value
Constant	1.71*	4.65	0.712
SDS-17	-0.46*	0.11	0.001
Biological sex	0.18	0.88	0.830
DDRI-2	0.09*	0.02	0.001
PCL-5	0.29*	0.02	0.001
CESD-10	0.22*	0.07	0.002
PDSS	-0.29*	0.05	0.001

Other	-4.09*	1.79	0.023
Length of Service	0.02	0.08	0.787
Income Over 81k	0.22	2.02	0.272
WIS-R	0.11*	0.03	0.001
SCC	0.31*	0.04	0.001

Note: ***significant** at $p < 0.05$; B = unstandardized regression coefficient; SE_B = standard error of the coefficient.

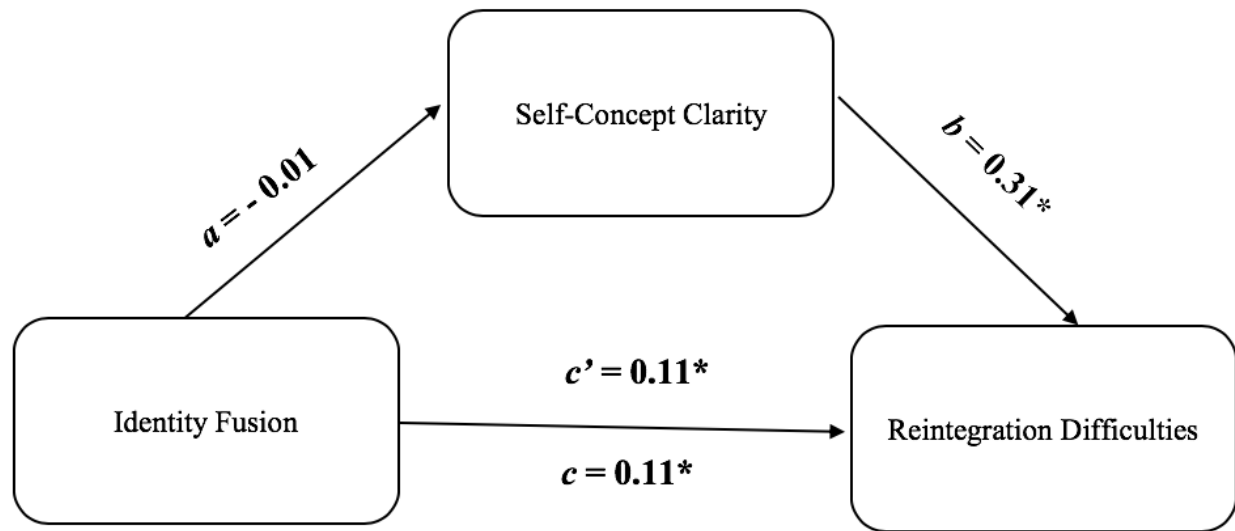


Figure 13. Visual representation of the mediation analysis with self-concept clarity with covariates included in the model, ***significant** at the $p < 0.05$ level

Appendix U

Exploratory Analyses Biological Sex

To explore if there were significant differences among the major variables of the study based on biological sex, *t*-tests were conducted and are presented in Table 23 below. All variables had a Levene's test of $p > 0.05$, except for length of military service variable, with a p of 0.02. As such, this variable was interpreted with caution and the equal variances not assumed statistic was interpreted. There was a statistically significant difference between males and females on reintegration difficulties (M2C-Q), self-concept clarity (SCC), post-traumatic stress disorder symptoms (PCL-5), alcohol abuse symptoms (AUDIT), length of service, and length of time since their last deployment. More specifically, as seen in the table below, females endorsed significantly more reintegration difficulties, higher self-concept clarity, and higher symptoms of post-traumatic stress disorder than males in the current sample. Males endorsed significantly more alcohol abuse symptoms, greater length of service, and greater length of time since last deployment (see Table 23 below for details).

Table 23
Comparison of means among biological sex

Variable	Male <i>M</i>	Male <i>SD</i>	Female <i>M</i>	Female <i>SD</i>	<i>df</i>	<i>t</i> -statistic	<i>p</i> value
SDS	8.58	3.74	8.32	3.93	532	0.80	0.424
WIS-R	61.53	12.95	61.92	13.77	532	-0.33	0.739
M2C-Q	18.15	14.37	20.71	14.64	532	-2.02	0.044
SCC	32.84	9.97	34.98	10.45	532	-2.41	0.016
WSEQ	67.72	15.03	68.87	15.25	532	-0.86	0.387
PDSS	37.64	8.06	36.74	8.38	532	1.25	0.210
DDRI-2	41.62	18.31	39.72	18.27	532	1.19	0.233
PCL-5	25.22	19.50	31.36	20.95	532	-3.49	0.001
CESD-10	10.33	5.99	11.02	6.22	532	-1.30	0.191
AUDIT	5.43	4.78	4.51	4.63	532	2.52	0.025
Length of service	7.41	5.65	6.52	4.74	532	1.99	0.047
Length since separation	5.62	4.10	4.95	3.82	532	1.91	0.056
Longest deployment	12.68	2.33	12.39	2.39	532	1.40	0.160

Length since last deployment	7.33	4.15	6.37	4.06	532	2.65	0.008
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To investigate the hypotheses results by sex, each set of hypothesis analyses was run on males and females separately. Due to the novelty of the hypotheses and the exploratory nature of these sex investigations, no covariates were included here. For each of these analyses described there was linearity and homoscedasticity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. Tolerance values were assessed to verify they were not equal or greater than 0.1, Variance Inflation Factor (VIF) was assessed to verify it was not greater than 10, and correlations were assessed to verify there were none at or over 0.70 and there was no evidence of multicollinearity. Outliers were assessed via boxplots, there were no values that were greater than three standard deviations above or below the mean. There was independence of residuals, as assessed by a Durbin-Watson statistic with no values greater than 1.87. There were no leverage values that were greater than 0.2 (leverage values less than 0.2 are considered appropriate; Laerd Statistics, 2015), and there were no values for Cook's distance above one. The assumption of normality was met, as evaluated visually via P-P and Q-Q plots as the data points ran snugly along the regression line.

Overall, when separated by male and female, most of the hypotheses were consistent with the overall sample hypotheses findings discussed in the Results and Discussion sections except for Hypothesis 4. The overall sample in the main study did not find a statistically significant identity fusion mediation, this finding was consistent with the female only sample exploratory Hypothesis 4 mediation. The male only sample did however exhibit a statistically significant identity fusion mediation. It is unclear as to why this may be and warrants future investigation to identify possible consistent sex differences and explanations for this difference.

Hypothesis 1:

A regression analysis was run to test if greater previous military self-expansion (WSEQ) significantly predicted greater reintegration difficulty (M2C-Q). separating the results of males and females to investigate any notable differences in these hypotheses.

Males: The overall model was statistically significant ($F(1, 299) = 29.87$, $p < 0.05$), with the predictor explaining 9% (Adjusted R square = 0.08) of reintegration difficulties (M2C-Q), a small effect size (Field, 2009). WSEQ was a significant predictor of reintegration difficulties as seen in Table 24 below. Greater previous military self-expansion significantly predicted less reintegration difficulties, consistent with the overall sample findings in the Results and Discussion sections.

Females: The overall model was statistically significant ($F(1, 231) = 12.63$, $p < 0.05$), with the predictor explaining 5% (Adjusted R square = 0.04) of reintegration difficulties (M2C-Q), a negligible effect size (Field, 2009). WSEQ was a significant predictor of reintegration difficulties as seen in Table 24 below. Greater previous military self-expansion significantly predicted less reintegration difficulties, consistent with the overall sample findings in the Results and Discussion sections.

Table 24
Multiple Regression Predicting M2C-Q from WSEQ for Males and Females.

	<i>Males</i>			<i>Females</i>		
Variable	<i>B</i>	<i>SE_B</i>	<i>p-value</i>	<i>B</i>	<i>SE_B</i>	<i>p-value</i>
Constant	37.65*	3.65	0.001	35.75*	4.33	0.001
WSEQ	-0.28*	0.05	0.001	-0.21*	0.06	0.001

Hypothesis 2:

A regression analysis was used to evaluate if Veterans who reported greater previous military self-expansion (W-SEQ) would report greater identity fusion (WIS-R), separating the results of males and females to investigate any notable differences in these hypotheses.

Males: The overall model was statistically significant ($F(1, 299) = 127.65, p < 0.05$), with the predictor variable explaining 29% (adjusted R square = 0.28) of identity fusion (WIS-R), a small to medium effect size (Field, 2009). WSEQ was a significant predictor of identity fusion as seen in Table 25 below. As such, greater previous military self-expansion significantly predicted less identity fusion with the military group in this sample, consistent with the overall sample in the Results and Discussion section.

Females: The overall model was statistically significant ($F(1, 231) = 95.75, p < 0.05$), with the predictor variable explaining 29% (adjusted R square = 0.28) of identity fusion (WIS-R), a small to medium effect size (Field, 2009). Again, previous military self-expansion (WSEQ) was a predictor of less identity fusion (see Table 25). As noted in the Males Hypothesis 2, these findings are consistent with the overall sample findings.

Table 25

Multiple Regression Predicting WIS-R from WSEQ for Males and Females.

Variable	Males			Females		
	<i>B</i>	<i>SE_B</i>	<i>p-value</i>	<i>B</i>	<i>SE_B</i>	<i>p-value</i>
Constant	93.45*	2.89	0.001	95.57*	3.52	0.001
WSEQ	-0.47*	0.04	0.001	-0.48*	0.05	0.001

Hypothesis 3:

A regression analysis was used to evaluate if Veterans who endorse greater identity fusion would endorse greater reintegration difficulties, separating the results of males and females to investigate any notable differences in these hypotheses.

Males: The overall model was statistically significant ($F(1, 299) = 41.68, p < 0.05$), with the predictor variable explaining 12% of reintegration difficulties (adjusted R Square = 0.11), a small effect size (Field, 2009). Consistent with the total sample results, male Veterans' endorsing greater identity fusion also endorsed greater reintegration difficulties (see Table 26).

Females: The overall model was statistically significant ($F(1, 231) = 12.37, p < 0.05$), with the predictor variable explaining 5% of reintegration difficulties (adjusted R Square = 0.04), a negligible effect size (Field, 2009). Consistent with the overall sample and male specific findings, females endorsing greater identity fusion also endorsed greater reintegration difficulties (see Table 26).

Table 26

Multiple Regression Predicting M2C-Q from WIS-R for Males and Females.

	<i>Males</i>			<i>Females</i>		
Variable	B	SE_B	p-value	B	SE_B	p-value
Constant	-5.71	3.77	0.131	5.86	4.32	0.176
WIS-R	0.38*	0.06	0.001	0.24*	0.06	0.001

Hypothesis 4:

The PROCESS extension in SPSS was used to evaluate if identity fusion (WIS-R) mediated the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q), separating the results of males and females to investigate any notable differences in these hypotheses.

Males: The overall model summary indicated that the predictor previous military self-expansion and potential mediator identity fusion accounted for 13% of the total variance (R square = 0.13) a small effect size according to Field (2009), ($F(2, 298) = 24.18, p < 0.05$) for reintegration difficulties.

The results of the analysis indicated the *c* path was the predictive association between previous military self-expansion and reintegration difficulties (WESQ; $B = -0.28, p < 0.05$), and was significant. The *a* path was the predictive association between previous military self-expansion and identity fusion (WESQ; $B = -0.47, p < 0.05$) and was significant. The *b* path identity fusion (WIS-R; $B = 0.29, p < 0.05$) remained a significant predictor of reintegration difficulties with the *c'* path previous military self-expansion ($B = -0.15, p < 0.05$) included in the

model. The bias-corrected bootstrap confidence intervals indicated that identity fusion (WIS-R) mediated the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q). As such, there was a statistically significant indirect effect ($a*b$) of previous military self-expansion (W-SEQ) on reintegration difficulties (M2C-Q) through identity fusion (WIS-R), $ab = -0.13$, $BC\ CI [-0.2144, -0.0628]$. See Figure 14 below for a visual representation of the mediation analysis. The completely standardized indirect effect of previous military self-expansion (WSEQ) on reintegration difficulties (M2C-Q) was -0.14, with bootstrapping SE of 0.03, and a $BC\ CI [-0.2217, -0.0665]$ was also significant. The findings here were in opposition with the full sample findings, in that the male sample was significantly mediated by identity fusion. However, there were no covariates included here, as such there may no longer be significant relationship when covariates are included.

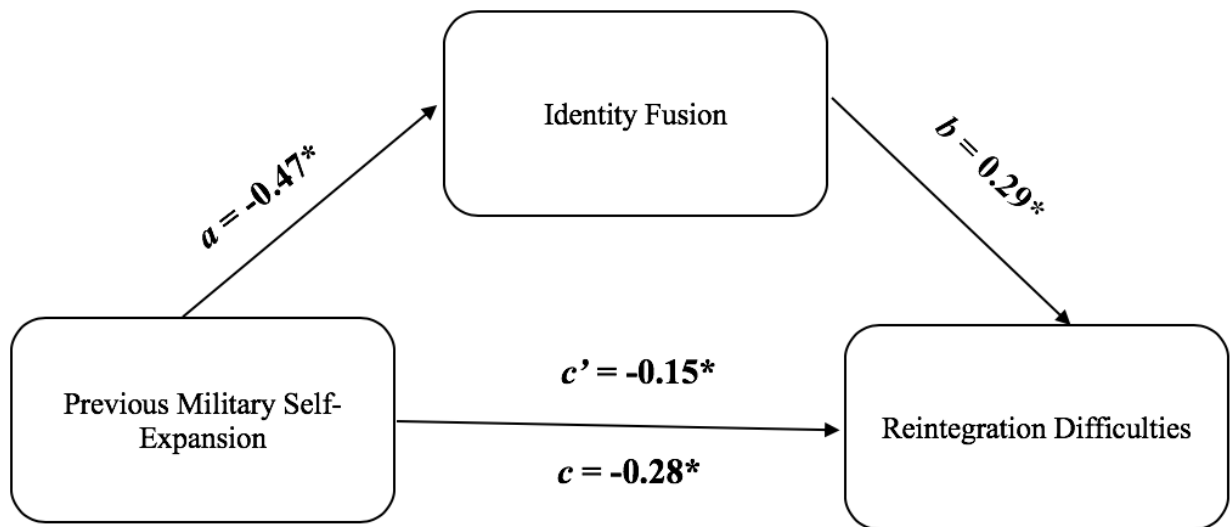


Figure 14. Visual representation of the mediation analysis with identity fusion (Hypothesis 4) for males.

Females: The overall model summary indicated that the predictor previous military self-expansion and potential mediator identity fusion accounted for 6% of the total variance ($R^2 = 0.06$) a negligible effect size according to Field (2009)), ($F(2, 230) = 8.20, p < 0.05$) for reintegration difficulties.

The results of the analysis indicated the c path was the predictive association between previous military self-expansion and reintegration difficulties (WESQ; $B = -0.21, p < 0.05$), and was significant. The a path was the predictive association between previous military self-expansion and identity fusion (WESQ; $B = -0.48, p < 0.05$) and was significant. The b path identity fusion (WIS-R; $B = 0.15, p = 0.05$) and was no longer a significant predictor of reintegration difficulties with the c' path previous military self-expansion ($B = -0.14, p < 0.05$) included in the model. The bias-corrected bootstrap confidence intervals indicated that identity fusion (WIS-R) did not mediate the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q). As such, there was not a statistically significant indirect effect ($a*b$) of previous military self-expansion (W-SEQ) on reintegration difficulties (M2C-Q) through identity fusion (WIS-R), $ab = -0.07$, BC CI $[-0.1712, 0.0088]$. See Figure 15 below for a visual representation of the mediation analysis. The completely standardized indirect effect of previous military self-expansion (WSEQ) on reintegration difficulties (M2C-Q) was -0.07 , with bootstrapping SE of 0.04 , and a BC CI $[-0.1773, 0.0092]$ was not significant. These findings were consistent with the overall sample findings; however, the males sample was indeed significantly mediated by identity fusion. This is an area that warrants additional examination in future studies to determine why this difference may be present, as well as to determine if this is a consistent finding.

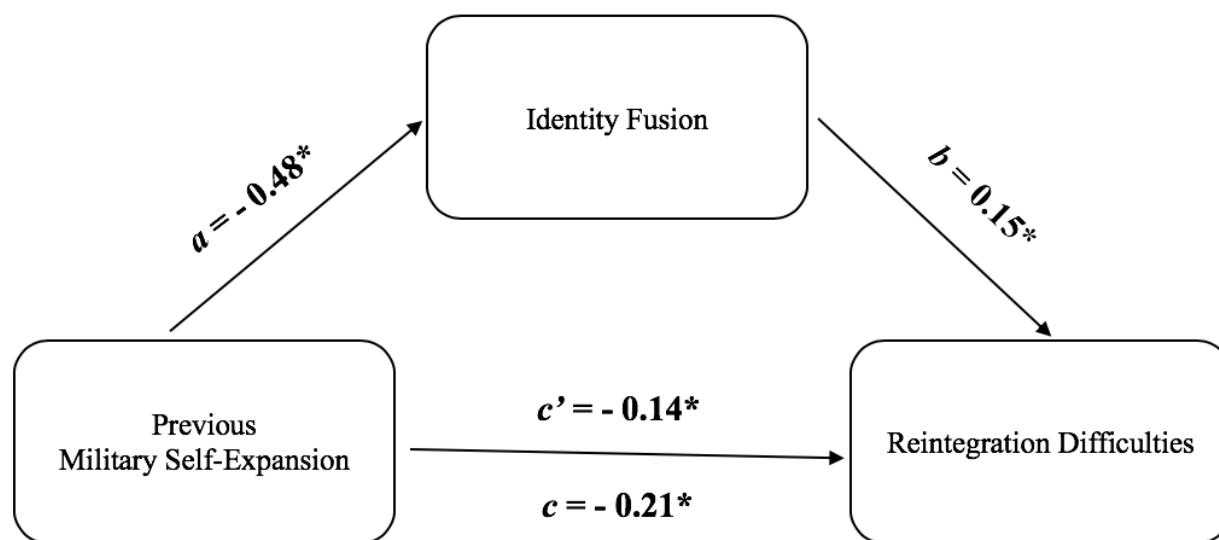


Figure 15. Visual representation of the mediation analysis with identity fusion

(Hypothesis 4) for females.

Hypothesis 5:

A regression analysis was used to test if greater previous military self-expansion (W-SEQ) significantly predicted lower self-concept clarity (SCC), separating the results of males and females to investigate any notable differences in these hypotheses.

Males: The overall model was statistically significant ($F(1, 299) = 22.74, p < 0.05$), with the predictor variable explaining 7% of self-concept clarity (adjusted R square = 0.06), a negligible effect size (Field, 2009). Like the overall sample, and consistent with previous literature, previous self-expansion (WSEQ) was a significant predictor of less self-concept clarity (see Table 27).

Females: The overall model was statistically significant ($F(1, 231) = 8.12, p < 0.05$), with the predictor variable explaining 3% of self-concept clarity (adjusted R square = 0.03), a negligible effect size (Field, 2009). Greater previous military self-expansion was a significant

predictor of less self-concept clarity (see Table 27). This was consistent with the overall sample, the male, and previous literature findings.

Table 27

Multiple Regression Predicting SCC from WSEQ for Males and Females.

	<i>Males</i>			<i>Females</i>		
Variable	B	SE_B	p-value	B	SE_B	p-value
Constant	44.78*	2.56	0.001	43.68*	3.12	0.001
WSEQ	-0.17*	0.03	0.001	-0.12*	0.04	0.005

Hypothesis 6:

A regression analysis was used to test if lower self-concept clarity would be a significant predictor of greater reintegration difficulties, separating the results of males and females to investigate any notable differences in these hypotheses.

Males: The overall model was statistically significant ($F(1, 299) = 92.33, p < 0.05$), with the predictor variable explaining 23% of reintegration difficulties (adjusted R squared = 0.23), a small to medium effect size (Field, 2009). Greater self-concept clarity was a significant predictor of greater reintegration difficulties (see Table 28), which is consistent with the overall sample findings, and inconsistent with civilian findings as discussed in the Discussion section.

Females: The overall model was statistically significant ($F(1, 231) = 75.74, p < 0.05$), with the predictor variable explaining 24% of reintegration difficulties (adjusted R squared = 0.24), a small to medium effect size (Field, 2009). Greater self-concept clarity was a significant predictor of greater reintegration difficulties (see Table 28), which is consistent with the overall sample and the male findings, and inconsistent with civilian findings as discussed in the Discussion section.

Table 28

Multiple Regression Predicting M2C-Q from SCC for Males and Females.

	<i>Males</i>			<i>Females</i>		
Variable	B	SE_B	p-value	B	SE_B	p-value
Constant*	-4.81	2.49	0.055	-3.63	2.91	0.214

WSEQ*	0.69*	0.07	0.001	0..69*	0.08	0.001
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Hypothesis 7:

The PROCESS extension in SPSS were used to evaluate if self-concept clarity (SCC) mediated the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q), separating the results of males and females to investigate any notable differences in these hypotheses.

Males: The overall model summary indicated the predictor previous military self-expansion and potential mediator self-concept clarity accounted for 26% of the total variance (adjusted R square = 0.25) a small to medium effect size (Field, 2009), ($F(2, 298) = 54.51, p < 0.05$).

The results of the analysis indicated that the c path, the predictive association between previous military self-expansion and reintegration difficulties, was statistically significant (WSEQ; $B = -0.28, p < 0.05$). The a path, the predictive association between previous military self-expansion and self-concept clarity (WSEQ; $B = -0.17, p < 0.05$), and the b path was the predictive association between self-concept clarity and reintegration difficulties (SCC; $B = 0.62, p < 0.05$), both remained significant predictors when the c' path previous military self-expansion ($B = -0.17, p < 0.05$) was included in the model. The bias-corrected bootstrap confidence intervals indicated that self-concept clarity (SCC) significantly mediated the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q). As such, there was a significant indirect effect ($a*b$) of previous military self-expansion (W- SEQ) on reintegration difficulties (M2C-Q) through self-concept clarity (SCC) $ab = -0.11, BC\ CI [-0.1647, -0.0617]$. See Figure 16 below for a visual representation of the mediation. The completely standardized indirect effect of previous military self-expansion (WSEQ) on

reintegration difficulties (M2C-Q) is -0.11, with bootstrapping *SE* of 0.02, and a *BC CI* [-0.1716, -0.0646]. These findings were consistent with the overall sample mediation analysis.

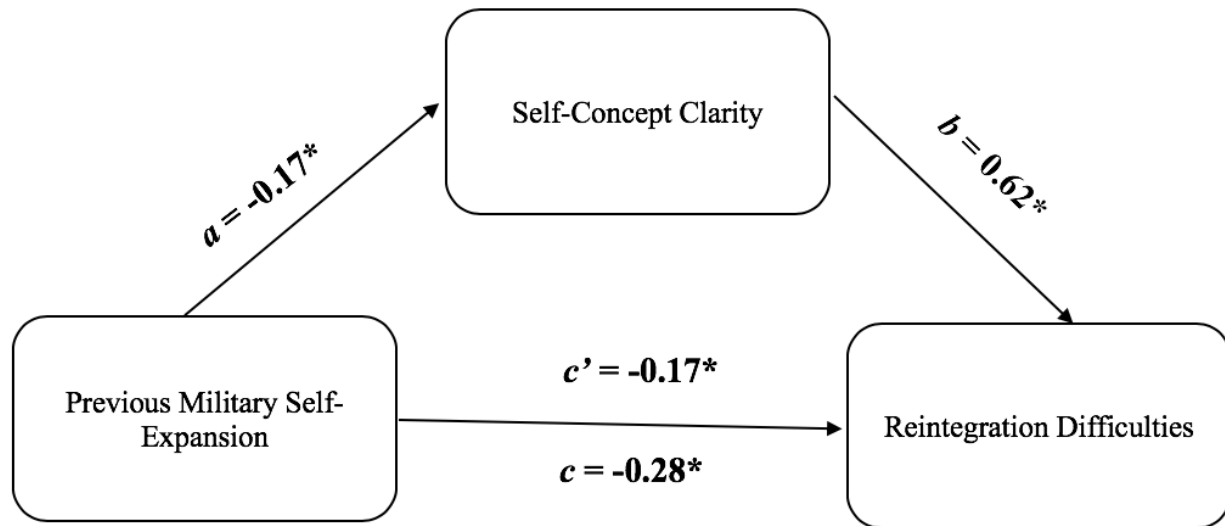


Figure 16. Visual representation of the mediation analysis with self-concept clarity (Hypothesis 7) for males.

Females: The overall model summary indicated the predictor previous military self-expansion and potential mediator self-concept clarity accounted for 26% of the total variance (adjusted *R* square = 0.25) a small to medium effect size (Field, 2009), ($F(2, 230) = 41.69, p < 0.05$).

The results of the analysis indicated that the *c* path, the predictive association between previous military self-expansion and reintegration difficulties, was statistically significant (WESQ; $B = -0.21, p < 0.05$). The *a* path, the predictive association between previous military self-expansion and self-concept clarity (WSEQ; $B = -0.12, p < 0.05$), and the *b* path was the predictive association between self-concept clarity and reintegration difficulties (SCC; $B = 0.65$,

$p < .05$), both remained significant predictors when the c' path previous military self-expansion ($B = -0.13$, $p < 0.05$) was included in the model. The bias-corrected bootstrap confidence intervals indicated that self-concept clarity (SCC) significantly mediated the relationship between previous military self-expansion (W-SEQ) and reintegration difficulties (M2C-Q). As such, there was a significant indirect effect ($a*b$) of previous military self-expansion (W- SEQ) on reintegration difficulties (M2C-Q) through self-concept clarity (SCC) $ab = -0.08$, $BC\ CI [-0.1422, -0.0268]$. See Figure 17 below for a visual representation of the mediation. The completely standardized indirect effect of previous military self-expansion (WSEQ) on reintegration difficulties (M2C-Q) is -0.08 , with bootstrapping SE of 0.03 , and a $BC\ CI [-0.1502, -0.0270]$. This finding was consistent with the overall sample and male sample findings.

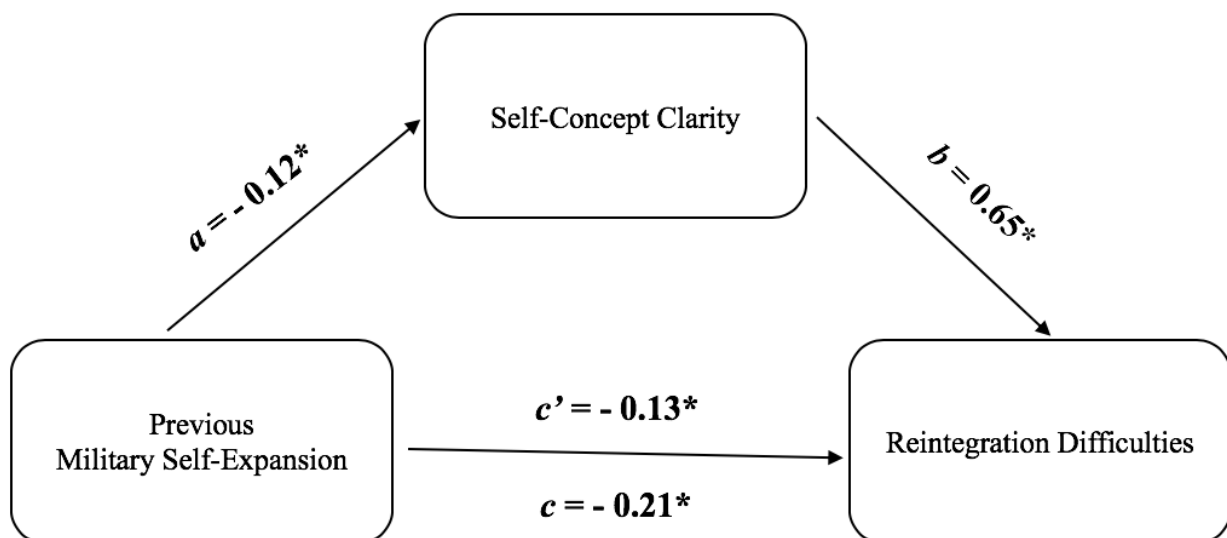


Figure 17. Visual representation of the mediation analysis with self-concept clarity (Hypothesis 7) for females.