SOCIAL FACTORS CONTRIBUTING TO U.S. MILITARY SERVICE-MEMBER WELL-BEING

By

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Abstract

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The U.S. military has one of the highest suicide rates between its current members and veterans of any domestic occupation at an average of 22 suicides per day. The high toll that combat operations and military life have on its members attract attention in the form of PTSD research, substance and alcohol abuse prevention, and interventions for veterans with traumatic brain injury. However, little research has addressed psychosocial preventative factors than can reduce the negative effects of military service. Social support and unit cohesion have strong evidence toward reducing the severity of mental illness in the civilian and military populations. Additionally, military identity is a potentially powerful indicator of the degree to which one aligns with the military, and those with a strong military identity may face greater difficulty once they leave and those social support sources are no longer present. The current research project seeks to address how social support, unit cohesion, and military identity can increase well-being. Based off pilot data with university campus ROTC students and veterans, I propose that social support, unit cohesion, and military identity have buffering effects against negative outcomes in U.S. military personnel. The following project extends investigations from the pilot study,
validates measurements of military identity and social support in a military-affiliated population, and discusses implications for future research and interventions.
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Dedication

For my Uncle Sam, who defected from the Red Army to fight for the U.S. during WWII, and never bothered to learn English.
CHAPTER ONE: INTRODUCTION

Military servicemen and women experience hardship like no other occupation in the U.S.A. One would think that factors which prevent negative outcomes in the general population, such as self-identity, group cohesion, and social support would be well-researched in military personnel literature, but these topics have scarcely examined. Furthermore, researchers have never combined these known buffering factors concomitantly in the military population. This project seeks to explore how social support, unit and group cohesion, and military self-identity interact with well-being in early-career, enlisted, and former U.S. Armed Forces servicemen and women using well-validated measures when available, and psychometric evaluation of military identity in a U.S. population.

Literature Overview

It is important to note that the U.S. military has experienced enormous changes since its inception, including the shift to the All-Volunteer Force (AVF) in 1974 (Britt, Adler, & Castro, 2006; Grossman, 1996). The AVF has changed the face of military service members in this country, ensuring that only men and women with a desire to serve are part of the defense force. The AVF imposed new guidelines which made it much more difficult to join, and ensured that the U.S. would have the best possible protectors, including a minimum passing score on the Army Services Vocational Aptitude Battery (ASVAB) test, minimum age requirements, strenuous physical restrictions, mental health restrictions, and educational requirements (Department of the Army, 2011; USAREC, 2015). Additionally, the military no longer accepts individuals without at least a high school diploma, and are encouraged to at least be in process of seeking a college education before joining (Selective Service System, 2017). During and prior to the Vietnam era,
physical and age requirements only needed their draftees to be young men, over 18 years old, with no visible disability (Selective Service System, 2017).

Despite modernization in recruitment practices, many of the policies instituted with the Vietnam War are still active, such as reassigning new, non-deployed personnel an average of every 6 months, and more senior, non-deployed personnel an average of every 11 months to gain them the most diverse experience possible (Britt et al., 2006). Previously, this policy helped service members find employment after they exit the military; now, it makes it difficult for them to establish personal connections outside of their work, and consistently uproots families before they can get a hold on their surrounding communities, from which they are already geographically and culturally isolated. The structural mechanisms which previously opened doors in the era before a college education was the norm now inhibits career transition for many exiting members. The structural mechanisms which previously opened doors in a time before college education was the norm now inhibits career transition for many exiting members. Additionally, service terms are longer than they were in the draft era, which means more relocation for military personnel during their enlistment, and longer stints away from their home networks (Britt et al., 2006; MacLean & Elder, 2007). While many of the skills that officers receive are easily transferrable to management and other business positions, training from lower-ranked positions does not necessarily qualify a service member for a position afterward. For example, a tank mechanic, while incredibly useful in the combat support field, cannot readily take those skills to an auto mechanic industry (Air Force Commander, personal communication, 2017). Even in its occupational focus, the military has fallen behind in serving basic needs to transition their force to a civilian life. Since the military seems to have an anachronistic view of what their former service members need to become occupationally successful when they return
home, it follows that policies and procedures in other aspects may be suffering from a lag in generational needs, as well. Post-hoc, evidence that former service members are doing poorly once they return from service is indicative in their outcomes, including interpersonal and family life, mental health, and physical health.

The U.S. military has been plagued with mental health, alcohol abuse, domestic violence, substance abuse, and physical health problems after military service. Military recruits face fewer close-combat, personal attacks by the U.S.’s foreign enemies, but instead see more intermittent explosive devices (IEDs), suicide bombers, guerilla attacks in citizen-heavy areas, and multiple deployments to hostile lands (Grossman, 1996). In the social media age, the military holds no secrets as to the horrors of war, and deployment is a reality for most active-duty service members during America’s longest conflict in modern history. For the last 15 years, any new recruit has entered the military knowing that they will likely face the front lines (Frederick, 2010; Grossman, 1996). While the military has an assortment of formal and informal systems in place to assist with the traumas of war, isolation from family, and training for peak resilience while in the military, the data continue to show that service members exit the military less mentally, physically, and interpersonally fit than when they entered, and have higher rates of psychological trauma, clinical depression, and family strife than the general population (Bowen, Mancini, Martin, Ware, & Nelson, 2003; Griffith, 2012; Pietrzak & Johnson, 2009). However, trauma cannot be the only explanation for the increase in negative outcomes within U.S. service members, as there is evidence that trauma and suicidal ideation are not directly linked (Bryan, Sinclair, & Heron, 2016). In fact, the suicide rates have most greatly increased among service members without combat deployment exposure over the last 8 years, indicating that there must be other variables contributing to poor outcomes (Eidelson & Soldz, 2012). However, individuals
with combat experience report they feel less reactive to both physical and emotional pain, increasing their capacity for self-harm (Lusk et al., 2015). Therefore, a more thorough investigation which encompasses both how service members’ experiences differ from civilians’ and what potential factors may increase risk must be conducted to predict how best to proceed with this unique, and critically important, population of individuals in the United States.

Social scientists must consider a multitude of factors to approach mental health in the U.S. Armed Forces. First, there are likely personal traits and intrinsic motivations that go into joining the U.S. military, as an AVF with high restrictions that applicants must meet for approval. Second, among occupations to choose, military personnel face prolonged exposure to extremely dangerous elements, and must contend with potentially maiming or killing other human beings in the name of their country. Finally, military personnel spend much of their service without contact with anyone other than fellow military personnel, and are separated from family, friends, and even their training battalions with each new reassignment as part of their military contracts. In high-risk combat theater, service members may experience communication blackout for months at a time with individuals from their home networks to avoid security risks, which places them in further dependence on their fellow service members, not only for survival, but also for social support and interpersonal connection. When considering the mental health components of service, social scientists must remember that service members who deploy may not have access to mental health services until long after they return from their deployment, delaying even possible early treatment for any issues they may face. Additionally, military culture has established a long-time stigma against seeking mental and physical health treatment, where service members who seek help are considered weak, while those who burgeon on without are seen as persevering and strong (Hinojosa & Hinojosa, 2011; Langhinrichsen-Rohling, Snarr,
Slep, Heyman, & Foran, 2011; Reed, 2004). Therefore, military culture and the environmental circumstances inherent in military service are both potential factors in determining what creates such a complex, and resistant, set of mental health issues unique to the U.S. Armed Forces.

Fortunately, interdependence theory has a groundwork for investigating complex problems with a multitude of environmental and interpersonal variables to consider, and thus will serve as the foundation for the current research problem.

**Interdependence**

Interpersonal social psychology provides a baseline for understanding human behavior beyond individual cognitive variables. Early theorists proposed that human behavior does not exist in a vacuum; rather, interpersonal interactions and environmental components are the pure factors through which researchers can fully predict human behavior (Holmes, 2002; Kelley, 1983). In more recent years, scholars argue that social psychology has neglected the interpersonal *situation* as a vital component of behavioral analysis, and has instead sought the universals of individual choice (Kelley & Turner, 2014). The mistake, theorists argue, is that human beings are fundamentally interdependent beings who watch for cues in their interpersonal interactions, form understandings of their world through an interpersonal lens, create schemas for interaction based on a fundamental understanding of the situation and personal experience with similar interactions (Holmes, 2004; Kelley & Turner, 2014). Therefore, social psychological researchers must understand mechanisms of behavior through interactive and relational terms, with both trait and environmental factors in combination with dyadic interaction variables as the true predictors of human behavior and outcomes.

Interdependence theory in its original form declared that social psychology’s foundation lies in Kurt Lewin’s original equation: $B = (p, e)$, as the often misinterpreted, “Behavior is a
function of person in environment” (Kelley, 1984; Kelley & Turner, 2014; Rusbult & Van Lange, 2003). While some theorists have translated the function as “behavior is a function of person and environment,” the original theory and paper clearly states the relationship between person and environment as inseparable entities. The tenants of classical interpersonal social psychology cannot remove the person from the environment, nor remove the environment from the person (Kelley, 1979, 1984; Rusbult & Van Lange, 2003). As extension of this concept, individuals not only choose their environments, but their environments perpetuate personal traits. Some researchers even argue that personality has a genetic basis, and that one’s environment is not only part of cognitive factors wherein the individual chooses their environment, but an innate property of the individual’s biology (Eysenck, 1990). Person and environment are inseparable and reciprocal down to a fundamental, biological origin (Boehm, 2009; Eysenck, 1990; Kelley, 1979). Dyadic interaction is also considered the core component of both personal and environmental factors, wherein each person brings their own set of observed experiences and personal traits to any given situation, and the core component of daily life is interaction with others (Holmes, 2002; Kelley, 1979; Kelley et al., 2003). Therefore, the key to one’s personal behavior lies in interpretation of their environment, which is created through interactions with others in interpersonal realms. Individuals become a product of their interpersonal environments, interact with those environments, and internalize observed interactions and forces directly imposed on them from those interpersonal environments. Hypothetically, individuals choose the interpersonal environments they wish to incorporate with, and those interpersonal environments also choose the person (Kelley, 1979; Kelley et al., 2003). When an interpersonal environment is no longer compatible with the individual, that individual may choose to change their interpersonal environment, or change their internal responses to the environment to create new
schemas toward expected interactions. Regardless of the decisions the individual makes, they are beholden to the sometimes unpredictable shift of culture and social relationships they are surrounded with. Therefore, as social scientists, it is critical to always determine what interpersonal factors act on an individual, and how that individual interacts with their interpersonal environment to get to the heart of behavior (Kelley & Turner, 2014). In order to understand how these interpersonal environments influence individuals, it is important to define interdependence in classical terms.

In Kelley’s (1979) summary, interdependence can only exist with three satisfying conditions: (a) interdependence requires both common and conflicts of interest; (b) the dyad needs to be aware of one another’s outcomes and respond to them; and (c) the dyad blames dispositions for conflict. Therefore, reliance on other human beings leads to an overall prototype of another person’s behavior, and we formulate our expectations of others through experience with that person or someone we perceive to be like them (Kelley, 1979). Additionally, this model outlines how we attribute dispositions to single individual interactions, but also acknowledges that these dispositions can “spread,” outward to small groups, large groups, institutions, cultures, and entire races. Each interaction has the potential to generalize to what we consider similar interactions with similar and dissimilar others. Our dispositional attributions are the core of what Holmes (2002) refers to as “story skeletons,” wherein individuals assign some core trait to another person through our interactions with them, and then see anyone in the same position as likely sharing those dispositions and with the potential to interact with us in similar, predictable manners. These story skeletons develop over time, and interactions which confirm schemas of interactions with that person or someone like them strengthen attributions about that type of person. When someone acts outside of the schema produced, individuals often create new
attributions without considering environmental context for the unexpected action (Holmes, 2002; Kelley, 1979). For example, in an instance where a husband may see his wife as a kind and gentle person, if he comes home to find her throwing plates against the wall, he may reform his opinion of her kind and gentle nature before questioning the circumstance that led to such an unexpected turn of events. Interactions shape individuals’ expectations for future interaction, and perpetuate through similar experiences. Story skeletons are also resistant to change, insofar as one’s observations that confirm the story typically outweigh experiences which contradict the expectation. Confirmation bias increases the likelihood that individuals will ignore any disparate experience, as well, and schemas of interaction are further solidified as individuals continue to seek out and affirm their attributions and expectations (Holmes, 2002). Environments give individuals the cues they require to form these schemas, and individuals seek out experiences that affirm their beliefs about a given set of interactions. In the military context, service personnel are stigmatized as the typical “jarhead,” if they embody even some of the personality and behavioral traits that come with that stereotype, and face scrutiny from both the civilian population and the leadership that supervise them. Additionally, service members may act accordingly in the military environment in order to be perceived as competent, and in alignment with military values. Therefore, the combination of environmental cues, previous interactions in the military context, and expectations of behavior lead to an almost unavoidable behavioral set for those who choose to become part of the U.S. Armed Forces. In concordance with relatively stable traits that may have contributed to an individuals’ joining the U.S. Armed Forces in the first place, interpersonal variables contribute to predictable behaviors once an individual has enlisted, and after they have completed their service. For social scientists, the difficulty comes in with identifying which interpersonal forces are most influential on the individual service
member, and which the service member perceives the most control over. Components of military identity, social support, and cohesion may be considered to determine what has the greatest impact on behavior for an individual in the military’s social contexts.

Human beings rely on environmental cues to signal their behavior in combination with their perception of the situation (N. Halevy & Katz, 2013; Nir Halevy, Chou, & Murnighan, 2012). Pure interpersonal social psychology satisfied these tenants through laboratory social dilemma experiments, wherein the researcher could control key aspects of the environment and observe behavioral outcomes. Social dilemmas are remarkably effective in understanding motives behind choice in interpersonal situations, but the restrictive nature of social dilemma games makes their generalizability difficult. Indeed, later researchers have denounced the social dilemma method as inadmissible in daily interpersonal interactions, as there are too many factors controlled, and most current social psychological studies are performed on decision-making, perceptions, self-identity, and other individual traits in absence of the environmental component social psychology declared so vital (N. Halevy & Katz, 2013). As a replacement for pure game theory research, one can instead investigate cues already present in the interpersonal environment in question, and determine if they have direct impacts on behavior. While less “clean,” than the purist methods, examining already existing environmental contexts can give a more generalizable picture of how individuals interact in real life.

In a military context, the situation again becomes a key part of understanding the plight of U.S. Armed Forces personnel. Their situation is unique among occupations that individuals may choose in our country, insofar as they choose not only to defend the country with their lives, but are placed in constant danger, work in harsh conditions, often live on the base where they work, spend most of their time with others in their occupation, and have had either life
experiences or have made decisions which permitted them to joined the military. In addition, military personnel develop schemas on how to interact with leadership, subordinates, and equally-ranked soldiers. Civilians also have perceptions of military personnel which may impact other psychosocial factors servicemen experience both while enlisted and after exiting the force. Therefore, research in military personnel is rife with both person and environment variables which cannot be taken out of context from one another. This project seeks to identify both personal and interpersonal factors that contribute to military personnel well-being, and outlines the environmental factors that make military life unique while bearing in mind the original tenant of social psychological study: that not only do military personnel choose their situations, but that their environments also play a reciprocal role in shaping their personal traits. To accomplish this, I first identify some key person factors, and then move to their interaction with environmental factors in the interpersonal military context.

Identity Theories

Identity is a critical component to how one chooses their occupation and social environment. One’s self-identity aligns a person with a social group or role, and permits cognitive reduction for comparison with other groups, freeing up limited resources for other evaluative processes (Tajfel, 2010). One’s social identity gives an individual a simple set of rules for engagement with others, an understanding of their place in a hierarchy, a schema for behavior in social situations, and a personal set of values that align with the social group they have chosen (Branscombe, Ellemers, Spears, & Doosje, 1999; Brown, 2000; Michael A. Hogg & Terry, 2000; Michael A. Hogg, Terry, & White, 1995; Stets & Burke, 2000; Tajfel, 2010). With a social identity, an individual no longer must think specifically through each social interaction, has an expectation for how new people within the same group will act towards them and others, and a
social schema for any activity within that group or with members of another, competing group (Michael A. Hogg & Turner, 1985). Additionally, schemas of one’s social compliance create easily predictable interactions between subordinates and leaders, creating easy-to-follow rules of engagement within occupational groups (Ashforth & Mael, 1989; Michael A. Hogg & Terry, 2000; Stets & Burke, 2000). When one chooses, or otherwise aligns with a social identity, they accept the corresponding group interaction norms, follow the in-group social hierarchy, and have blueprints for which groups correspond or misalign with in-group values.

Social identity theory (SIT) contends that individuals seek groups in part because they are attracted to the individuals within that group, and in part to enhance self-esteem in order to be part of something greater than themselves. (Michael A. Hogg & Terry, 2000; Michael A. Hogg et al., 1995; Michael A. Hogg & Turner, 1985; Tajfel, 2010). According to SIT, individuals voluntarily become part of elite groups for heightened internal self-worth and social status (Tajfel, 2010). Additionally, social categorization occurs as a means reduce one’s cognitive load in making decisions and choosing appropriate behaviors with one’s ingroup and towards outgroups (Michael A. Hogg & Terry, 2000). Social categorization occurs when an individual aligns with a specific group’s values and behaviors towards others both within the group, and outside of the group (Michael A. Hogg et al., 1995). Especially in organizational contexts, this theory demonstrates both a self-identity integration into an organization group, and an explanation for the behaviors that individuals will engage in with opposing groups. SIT also explains that individuals will choose group identification over outgroup members, especially when the ingroup provides enhanced social status and self-esteem (Michael A. Hogg & Turner, 1985). However, this theory struggles with explaining why individuals may continue to identify with a group that they deem socially aversive, or why individuals may still show kindness and
generosity towards members of a competing group. SIT also ignores situations wherein an individual may cooperate or show kindness with members of a less desirable outgroup, and struggles to explain why individuals leave groups which are advantageous for them. SIT does acknowledge that individuals without a group identification will overrule typical in-and-outgroup dynamics when they have a keen attraction towards a member of an outgroup, but these anomalies lend themselves to alternative explanations (Michael A. Hogg & Turner, 1985). Other approaches may better explain self-identity within complex organizations such as the military.

Some researchers argue that social alignment and hierarchy formation are innate parts of the human experience, as we have evolved from tribes that required interaction and hierarchy formation to survive the harsh conditions of early human existence (Boehm, 2009; Cummins, 2006; Van Vugt, Hogan, & Kaiser, 2008). In bounded generalized reciprocity (BGR), group identity is formed as a result of reciprocal or expected reciprocal exchange, and only becomes salient when a member of a group is aware of both theirs and others’ group membership (Yamagishi, Nobuhito, & Kiyonari, 1999). Additionally, BGR highlights that group membership creates a system of trust and security, and ensures that each member of the group is help accountable in supporting each other members, thus showing that there are inherent psychological benefits to group membership and conformity (Balliet, Wu, & De Dreu, 2014). Group members take special care to preserve their reputation within their group membership by adhering to group values and norms, and interact with one another using prescribed expectations derived from the group (Cummins, 2006). In either case, group membership and identity with that group becomes a valuable predictor in behavioral orientations toward members of the same group, and against members of others. Rather than following group coordination as an established set of rules within the identity, BGR states that members follow tacit coordination
within their group in order to receive the expected benefits that come with group membership (Balliet & Van Lange, 2013; Balliet et al., 2014). Exchange, direct or implicit, perpetuates one’s standing within the group, and holds benefit for both the receiver and giver within the social organization.

None of these theories have managed to create a fully universal construct of identity and attitudes towards and within voluntary groups (Romano, Balliet, Yamagishi, & Liu, 2017). However, components of these theories have been utilized, anecdotally, to describe how individuals within a military context behave towards other military personnel and group members. There seem to be areas of self-identification and alignment with military groups during the indoctrination process of military service, and potential influence of internal values, attraction towards disciplined military structures, and value alignment with the military group as a whole that encourages individuals to enlist. Additionally, a requirement for maintaining one’s military status and reputation is cooperation with the military group. Implications for how military cohesiveness will be discussed later, but it should be noted that no studies that reference alignment and military identity note these theories directly. Rather, components of these theories are visible in explanations of why individuals join the Armed Forces, and why they struggle once they retire from service as their military identity maintains, but their membership dissolves with civilian transition.

**Person Factors**

In following the social psychological equation, individual factors in military personnel are just as vital and unique as their environmental factors. Military personnel are potentially different from their civilian counterparts in a few ways. First, since the AVF, military personnel must be willing and able to join the military to commission. Physically, about 25% of new
recruits in the U.S. Armed Forces are rejected for physical reasons, while others are rejected due to scores on the ASVAB, or educational requirements (White et al., 2014). In fact, only about a quarter of the entire U.S. population is even eligible to join, due to restrictions in physical and mental acuity in the contemporary military (Casey, 2011; Lester, McBride, Bliese, & Adler, 2011). Additionally, the military still mostly attracts individuals from lower socioeconomic brackets (likely due to promises of high signing bonuses, incentives for college tuition and loan forgiveness, and job security), which would automatically place the target population at lower education levels and lower physical ability due to malnutrition, geographical location, and knowledge about physical fitness (MacLean & Elder, 2007). Those who join with less than a high school diploma are less likely to complete three years of service, which negates their chances of rising through the ranks (MacLean & Elder, 2007). Therefore, those who enter at low rank and do not benefit from promotion within military service are less likely to achieve the income and incentives required to overcome the financial hardships they joined the military to escape. Individuals only start to see comfortable salaries once they reach mid-level officer ranks, which are primarily composed of middle to upper-class white men (Lyles, 2010; MacLean & Elder, 2007). Additionally, culture within lower-socioeconomic status individuals has the potential to directly clash with military culture, which might explain why so few continue to career military service. Leadership within the military mostly feeds from national Reserve Officer Training Corps (ROTC) programs within U.S. universities, providing a steady stream of middle-class, educated leadership for all branches of the defense force (Office of the Deputy Under Secretary of Defense, 2013). Most of the leadership base is higher on the educational and class spectrum, while lower-ranked military service members are on the lower, but still selective, portion of the population.
A future draft may change the demographics of the military, but with the potential introduction of women into the draft, and changes in the lottery system present prior to Vietnam, those data will be unknown until new draft rules are implemented (Selective Service System, 2017). For the moment, it is important to note that the vast majority of military personnel are service members who join at low ranks, come from minority and underserved backgrounds, and do not stay longer than their initial recruitment contract. There are several key components of military service which may create dissonance between one’s idea of what military life entails, and what the actual experience brings (Alarcon, Lyons, & Tartaglia, 2010; Grossman, 1996; Higate, 2001; Woodward & Jenkings, 2011a). Additionally, it follows that with a large portion of the military population entering the force with similar cultural and socioeconomic experiences, there may be predictable reactions to military culture once enlisted. Since these individuals are unlikely to ascend ranks, compose a majority of the Armed Forces, and demand the majority of veteran care after they leave the Armed Forces, it is possible to assume that most service members adopt similar attitudes towards social identity, mental health treatment, and interactions with leadership and peer service members before, during, and after their service is complete. The following subsections on stigma, trust, and military identity highlight some personal factors in interaction with standing military environmental factors which may alter one’s perception of the military experience after they contract and begin service.

**Stigma.** While not well-researched, stigma from civilians against military service may play a part in the difficulties that military personnel have in transition to civilian life. Stigma originally aroused investigation as a research topic with (Goffman, 1963) text outlining how stigmatized individuals see, and are seen, by the social world around them. Stigmas that can be concealed (e.g., stigmas of “character,” or identity, as Goffman describes), create powerful
internal forces within an individual that can prevent fully functioning interpersonal relationships, as the individual consistently feels as though they have something undesirable about themselves that others must not become aware of. In opposition to physical stigmas, such as disabilities and disfigurations, individuals with character and identity traits cannot be easily stigmatized by strangers, but instead face a potentially more powerful stigma of their disposition and personality. Goffman argues that this can be a much longer-lasting and more ostracizing stigma, as individuals with these stigmas of identity have more self-loathing, practice greater efforts in concealment, and feel more threatened by their exposure than those with readily visible physically stigmatizing traits. In addition, Goffman defines stigmas of identity viewed as choice once exposed. In other words, individuals with stigmatized character are less likely to be seen as helpless in their undesirable traits than those with physical stigma, and therefore more blame is placed upon them for holding such traits. Depending on the degree of stigma within one’s identity, someone with an identity stigma could face greater interpersonal strife than someone with permanent disfigurement, with great intellectual disability, or other readily visible stigmatizing condition, in that the individual with the identity stigma presumably has had the opportunity to change the underlying factors that created the identify malformation.

In more modern scholarship, stigmas of identity come in four forms: pervasive, compartmentalized, diluted, and idiosyncratic (Kreiner, Ashforth, & Sluss, 2006). Kreiner et al. describe stigma as a potential barrier to identification with work, stating that there are fundamental components of stigma which have the potential to distance someone from their occupational identity. Both “breadth,” (the amount of responsibilities in the work that are stigmatized) and “depth,” (how involved one must be in that work) create differences substantiated by the requirements of the job and the amount of “dirty work,” mandatory within
one’s occupation. Stigma is closely associated with occupation, in that individualistic culture inhabitants tend to most readily identify themselves by the work they perform, rather than other personality or interpersonal traits (M.A. Hogg & Turner, 1987). Individuals have the potential to remove themselves from their work identity to the degree that they choose to be responsible for reprehensible work responsibilities, but if their work identity is fully integrated with their social and self-identity, one has little choice but to embrace the entirety of one’s work as a part of the self (Haslam & Knippenberg, 2014). Individuals who work in stigmatized fields, or have work responsibilities considered undesirable by their culture, face interpersonal strife when others learn of the type of work they do to make a living. Work, therefore, becomes both an internally encompassing part of the self, and a key perceptual component from others towards individual attributions and traits.

Grossman (1996) discusses the stigmatization of Vietnam War veterans in similar terms. Vietnam was the first of the U.S.’s morally reprehensible foreign wars, and participants in the guerilla warfare prominent in Vietnam were socially stigmatized when they returned to the United States. The country’s political climate and reaction to the Vietnam conflict corroborated with a need for scapegoats, and returning service members became an easy target for anger. Additionally, many Vietnam veterans saw their parents and grandparents go through one or both of the Great Wars, wherein returning soldiers were heralded, praised, celebrated in parades, and had monuments erected for them (Grossman, 1996). In comparison to the Great Wars, Vietnam veterans were villains in the annals of American war history, and were significantly less likely to return with the social support they required to recover from Vietnam’s brutality (Cobb, 1976). Vietnam soldiers are underrepresented in veteran social organizations, with fewer in that generation seeking companionship from others who experienced the conflict than other, less
controversial wars. Unfortunately, it seems that a large barrier to service veterans’ ability to seek social networks who complement their experiences is the political landscape and opinions of service: both of which are outside of veterans’ control. Vietnam veterans who volunteered to join the war were most likely to face social retribution, as they not only participated in atrocious acts of violence within the Vietnam theater, but did so willingly as a symbol of sacrifice to a war that many civilians saw as unnecessarily violent towards a culture with no direct animosity towards the United States (Grossman, 1996). In Kreiner et al.’s view, veterans of the Vietnam conflict may best fit with pervasive stigma, as they cannot separate themselves from the breadth and depth of atrocity within the war, and all were considered guilty of stigmatizing acts.

(Kreiner et al., 2006) description of compartmentalized stigma may best fit with the current military generation. While the Iraq and Afghanistan theaters have held some controversy, they have not been overwhelmingly abhorred in the same manner as the Vietnam war, and those who fought still can stand by the idea that both countries were viable threats to the U.S. The fall of the Twin Towers and active terrorist activity from both Iraq and Afghanistan somewhat excuses atrocities (e.g., killing, maiming, and psychological warfare) combatants commit in the name of their country. Killing and bombing are an act of contemporary war, rather than singular acts by evil military members. They are, in this case, at least somewhat justified. Research supports that U.S. and foreign military members generally view their service as a sacrifice for one’s country, and a necessity to protect the freedoms of their country (Bauman, 2008; Higate, 2001; Sasson-Levy, 2003b; Woodward & Jenkings, 2011a). However, in-depth research on stigma against the current generation of soldiers has not been adequately studied, and will not be approached in this project. Nevertheless, compartmentalized stigma may explain some of the difficulties that military-affiliated individuals have in reintegrating with civilians, and the degree
of closeness and support service members receive and seek from fellow service members. When veterans feel shame towards their military experience, they are less likely to seek companionship from those who might better understand their circumstances. In addition to the inherent social distance military experience creates from the civilian world, veterans who feel disconnected from other veterans find themselves with few options to satisfy their need to belong. Both internal and perceived stigma in the current military generation are a necessary component in understanding the complicated social environment today’s military generation contends with in their social world, and one that cannot necessarily be altered without a functional change in cultural views of military service.

To partially combat the complex interplay between stigma and one’s social and self-identity within the military, the Department of Defense has placed emphasis on creating formal and informal systems of support within the military framework. Access to mental health services, physical fitness centers, and a focus on social and spiritual health have allowed for greater resources in the military community (Bowen, Jensen, & Martin, 2016). However, resource availability is confounded by the degree to which service members willingly access these services, and perceive them as trustworthy and valuable for their individual needs.

Trust. Recent work has focused on the importance of trust in formal and informal systems within the U.S. military as an integral component in seeking help when one’s mental or physical health is at risk (Bowen, Jensen, Martin, & Mancini, 2016). Social responsibility seems to be an important predictor in determining the likelihood that service members will trust the systems of support the military has in place; this factor is especially valuable for male service members, and demonstrates an interaction between the internal person-factor of social responsibility, and the environmental components specific to the military context (Bowen,
Jensen, Martin, et al., 2016). That is, military personnel serve as protectors for their country, and those who match with this underlying expectation seem to experience a reciprocal trust that others within the system will provide the same level of support for them. Exchange theory easily explains this dynamic, as individuals believe that the organizational system they are members of will support them to the same degree that they support their organization (Balliet et al., 2014).

The U.S military has created a variety of programs to benefit its service members, including child care networks, Family Readiness Groups (FRGs), private counseling networks, programs for financial training, housing management, and travel groups, but these systems are only beneficial to the extent that service members are willing to access them and perceive benefit from their participation. Trait factors which impact social involvement and social responsibility may have a direct impact on how much service members get out of these programs, and how effective individuals are at finding equivalent support once they leave their service. Some of these traits may be captured in military identity, which encompasses patriotism, conscientiousness, perception of the military as family, and perception of the military as occupation. Additionally, accessing formal mental health care services through the military has the potential to put service members at risk; should an individual receive a chronic mental health diagnosis, command may find that member unfit for their current duty, which reduces the likelihood of promotion or desirable reassignment, or may result in an early discharge (Appolonio & Fingerhut, 2008; Bauman, 2008; Foran, Heyman, & Slep, 2011; Kuehn, 2009; Lusk et al., 2015; Meyers, Chapman, Gunthert, & Weissbrod, 2016). The Comprehensive Soldier Fitness Program (discussed later in this manuscript) was designed to reduce the stigma associated with seeking care, but does not reduce the concern in punitive action against those who face chronic diagnosis that directly conflict with a service member’s ability to carry out
complex and stressful operations. Therefore, trust in the formal system that is supposed to protect current service members is directly inhibited by internal policy. One can seek help, so long as that help is not for a condition which makes one unfit for service.

Another interesting trust component is the degree to which individuals feel part of the military community, and therefore contribute to the long-standing health of that community. Hypothetically, individuals who are part of a healthy, functioning formal system where they have their needs met should experience greater degrees of trust within that system with the passage of time, as duration within the community creates more opportunities for the individual to need the support of the surrounding community. However, individuals who have been part of the military community for longer are actually less likely to perceive support from their community than those who have been members for shorter durations (Bowen et al., 2003). While one cannot assume a direct relationship between formal systems’ effectiveness within the military community and the degree of trust that one has with the formal system, this does suggest a reciprocal relationship between the degree to which individuals feel their military community supports their needs and the degree to which the community does. If those who are members of the community for longer durations feel resentment and disconnection towards the military community, then it follows that there are fundamental issues in the degree of support provided to military service members, and the trust they therefore tend to feel towards military communities and formal base systems as a generalized whole. In this scenario, it is important to signify both the environmental influence of a potentially anemic support system and the internalized identity of military service member. If individuals feel they cannot rely on the military community to support them and their family, a lesser degree of support will ingrain as part of the military
identity, and mistrust in formal and informal systems of support within the military community will follow.

With trust in military community, including formal and informal systems in place to support military service members, support for other military service members becomes an internal component of military identity; individuals who join the military may do so to be part of an organization that shares similar cultural values in protecting their country, and connecting with a band of brothers and sisters with similar values. Therefore, part of integrating with the military force is identification with known Armed Forces ideals. Individuals who have served for longer durations may become resentful when they discover that their interpretation of the military experience does not, in fact, match their actual experience once they begin service. In this way, one’s social identity with military values has the potential to buffer or hinder one’s ability to successfully navigate the interplay between a bureaucratic social system and one’s interpretation of military life. A seldom-recognized connection between the military environment and person factors is the degree to which one aligns with a military identity: that is, a core set of values and expectations about embodying a U.S. Armed Forces service member.

**Military identity.** Occupational identity may also be fundamentally formulated not only to ensure seamless organizational functioning, but also to perpetuate the survival of that organization and its members. As humans evolved to work in larger groups, the continued inherent need for survival exists in maintaining the organization’s usefulness, and group membership fortifies one’s chances (Boehm, 2009). One’s alignment with an organization harkens back to times where one’s physical survival relies on others’ support and collaboration. Many organizations seem to echo tribal factions, with members within the organization performing in accordance with their skillset for the greater good of the larger group.
Additionally, compensation comes in the form of both money and satisfaction with one’s work (Hirschi, 2012). Money provides the means to obtain basic needs and wants, and satisfaction with one’s work elicits a sense of belonging within the organization (where most people spend a majority of their lives). Boehm argues that individuals so easily and willingly fall in line within organizational hierarchy and norms because it reflects humanity’s tribal natures, in that allowing those with greater skill and resources to rule is at least partially ingrained in our internal biological structure. Therefore, when the working team runs smoothly, we are intrinsically motivated to carry out tasks that ensure the continued functioning of the group.

Occupational identity is especially important in males of individualistic cultures, as men tend to align their personal identities with the work that they do (e.g., “I am a construction worker,” vs. “I do construction.”) (Emslie & Hunt, 2009; Haslam & Knippenberg, 2014). Some organizational identities are more pervasive than others, as some occupations are inherently more resource-intensive than others. For example, someone who works a typical office job spends about eight hours per day in their work environment, and may only have a strong identity to their work while they are in the office. However, someone with work that requires constant engagement, such as an emergency medical surgeon, will align more closely with that identity at all times: especially if they have few identities that conflict with that organizational identity (Stets & Burke, 2000). In a military context, personnel often not only report to work during office hours, but work, eat, and sleep under their organization’s system, either by living on the base where they work, or utilizing many of the provided services within the defense organization. For example, most all military bases have commissaries, medical clinics, physical fitness facilities, and entertainment that are separated and discounted from civilian services. Additionally, service members are always “on call,” to their work, even if they are not in training.
or deployed as part of their enlistment contracts. In return, the military provides housing, access to food, hygiene, training, physical fitness, spiritual fulfillment, childcare, spousal support, and medical and mental healthcare.

Early-career service members, enlisted personnel, and veterans share common and highly visible aspects of military identity. Uniforms, regalia, haircuts, stance, and gait are all universal markers of military service, and continue to maintain their visibility far beyond their contracts. ROTC cadets and current members both wear uniforms easily understood as military-affiliation by the general public (Franke, 2000). When not uniformed, military-affiliated regalia replace their wardrobe. T-shirts, hats, backpacks, car stickers, haircuts, gait, and posture all differentiate in those who have served or trained to serve, and often persist beyond when one leaves the service. In fact, those who are not yet permitted to wear the uniform, such as cadets who have yet to contract for military service, often visit military surplus stores to purchase regalia that readily identify them as potential members of the Armed Forces (Army LTC, 2016, personal communication). Similar behavior is seen in former military service members; bumper stickers, backpacks, license plates, and clothing accessories are highly visible in those who have served.

While military identity has not been adequately studied in the U.S., literature on foreign militaries paint some picture of what comprises self-identity for individuals in compulsory military service or foreign volunteer militaries. Masculinity appears as a theme inherent in military cultures, and hegemonic masculinity has been targeted as an inherent problem in the military force. Most notably, the Israeli Army has a compulsory service requirement which fulfills both citizenship requirements and a cultural rite-of-passage into adulthood. Identity for soldiers in the Israeli Army focuses on participation in combat, wherein men in the force do not feel they have satisfied the full potential of their military service until they are assigned a combat
role (Sasson-Levy, 2003b). Those who are unable to serve in a combat capacity behave differently, insofar as they find an alternative, inherently masculine identity to fulfill the internal desire to protect and serve their country, such as provider for their female family members back home, or combat support for their military brethren in arms (Sasson-Levy, 2003b). Female combat soldiers defer to masculine prototypes to fully integrate into the Army, but have an advantage in that enemies of the Israeli force are afraid of female combat members, potentially bypassing some of the identity diffusion inherent in a feminine gender identity in a masculine occupational role (Sasson-Levy, 2003a). Middle-Eastern enemies avoid conflict with female Israeli Army combatants because they consider it dishonorable to be killed or maimed by a female service member due to cultural stereotypes of the weak female sex (Sasson-Levy, 2003a). However, female combat soldiers still are not seen as “real” warriors, instead taking advantage of the cultural anomaly they present when battling conservative Middle Eastern forces (Sasson-Levy, 2003a). Despite the clear benefits to having female combatants on the Israeli side, they still are not seen as the tangential warrior, but rather a secret weapon in a war against a foolish enemy. Overall, while female soldiers are incredibly effective, they begin on an uneven playing field with naturally male counterparts.

Research has shown that female West Point cadets attempt to embody both feminine and masculine characteristics in order for their fellow cadets to recognize them as capable, credible soldiers (Matthews, Ender, Laurence, & Rohall, 2009). Female cadets adopt masculine aesthetics, highlighting the continuing importance of overt masculine expression in the U.S. military. Trends with other Westernized militaries shows that there are some valid parallels to make between nations in warriorism, masculine attributes, and the perils that follow with social requirements for military involvement. Scholarship in masculinity in foreign military identities
also demonstrates that warriorism must be satisfied in some fashion, even if individuals cannot engage in the ideal combat engagement. However, some scholars argue that masculinity is no longer a vital component of U.S. military culture, and instead a more professional and intelligence-oriented military has overcome the combat-obsessed militaries of eras past (Franke, 1999; Hajjar, 2014). The author knows of no current research that can confirm this claim, though theoretical and propositional articles have since been released that document a necessity of reducing toxic leadership and masculinity from U.S. military forces (Reed, 2004; Reed & Olsen, 2010; Williams, 2005). Scholars argue that hyper-masculine traits do more harm than good both in general leadership and on the battlefield.

Research on the Australian Navy and U.S. Army has outlined that hegemonic and toxic masculinity has created barriers in the full integration of female service members, from leadership’s attention to sexual harassment claims to performance reviews of female sailors (Agostino, 1998; Biernat, Crandall, Young, Kobrynnowicz, & Halpin, 1998). Leaders believe that women are a detriment to the “band of brothers,” mentality aboard Australian Navy ships, and at the time this article was written, training videos still showed women in a “damsel in distress,” gender role, which further emphasized women as the weaker sex and therefore inadmissible as true sailors (Agostino, 1998). In a qualitative study of British military, highlight the importance of combat training in active-duty personnel (Woodward & Jenkins, 2011b). While not directly associated with masculinity, according to (Johansen, Laberg, & Martinussen, 2013a), combat training initiative is a key portion in warriorism attenuated to military service. Warriorism is defined as the desire to acquire complex combat weapons training and engage in combat operations against enemies of one’s country (Johansen et al., 2013a). British soldiers reflected on photographs during their commissions, and combat and combat training appeared as a strong
trend in their personal experience. They joined to learn to fight, and to gain a sense of 
brotherhood that comes with combat operations (Britt et al., 2006; Siebold, 2011; Woodward & 
Jenkings, 2011a). Again, the warriorism and corresponding masculinity become an inherent 
motivation for joining the military, and coping with the trauma associated with that activity. At 
the very least, for these soldiers, military identity is pervasive in justifying past experiences, and 
sacrificing for one’s country, especially in terms of combat operations and training. Without a 
standardized definition of masculinity, scholars in this field will struggle to comprehend what the 
factor entails. Masculinity may be composed of the more warrioristic components of military 
service, or the collectivist and patriotic components that (2013b) describe. Until scholars 
converge on a definition, comparisons between foreign and domestic militaries in masculinity 
will remain uncertain.

In addition to warriorism, other important concepts in military identity are idealism and 
individualism. Idealism aligns with patriotic U.S. military values, while individualism focuses on 
one’s value in their work, and the degree to which the actor sees their occupation within the 
military as different from a normal job Johansen et al. (2013a). (Johansen, Laberg, & 
Martinussen, 2013c) were unable to find strong evidence of professionalism in the Norwegian 
sample, but they, and other researchers, note that professionalism may be more prevalent in 
combat-heavy militaries and those that spend a longer time deployed, such as the U.S. forces 
(Vuga & Juvan, 2013). Military identity may be a key indicator in separating soldiers who 
display hardiness after trauma, and those who do not. Warriors join to battle, and if they are not 
permitted to do so and never deploy, a key part of their self-identity is never realized. Those high 
in idealism who find that their military does not fully serve their purpose may face similar 
dissonance (i.e., participating in controversial wars and apolitical operations). Those high in
individualism may not fully align with the collectivist, cohesive environment of high-stakes combat and alignment with protectionism and nationalism under the tenants of their country’s political mission. If a service member is high in individualism, there is little within the military system that could alter their perception of service as anything more than any other job.

Each factor could contribute differently to veterans, as well. Those with strong military identity may find themselves unable to let go of an identity that clashes with civilian life, and those with a weak military identity may be unsatisfied with military service. One study of U.S. veterans supports this idea; veterans high in warriorism showed higher levels of PTSD and depression symptomology: especially in terms of how much they saw their fellow combat brothers and sisters as family (Lancaster & Hart, 2015). It seems that the traditionally masculine role could be harmful after military service, as service members who flourished amidst battle will have a harder time reconnecting in civilian life, short of locating a position within a similarly protective civilian workforce such as EMS or police work (Higate, 2001). Additionally, those who cannot fulfill highly warrioristic roles while in service (i.e., those serving administrative or intelligence duties), may suffer from identity nonfulfillment. Identity may therefore explain the rise of suicide among nondeployed service members.

In any of the aforementioned cases, the importance of discovering the underlying mechanisms of military identity cannot be overstated. Military identity may be an important and overlooked key into understanding why some service members are at higher risk than others in developing pathologies in response to military service. Self-identity has implications for cohesion and social support, which have impacts on well-being (Cobb, 1976). The author knows of no current connections in the literature of military identity, cohesion, social support, and well-being, but once scholars have a better understanding of what contributes to one’s social identity
in a military environment, research can start to determine what factors of military identity contribute to a healthier Armed Forces. The current study seeks to find connections between these variables in a specific military context.

**Social and Environmental Factors**

Many variables can impact military personnel’s experience within the organization, including where they complete boot camp, what kind of leadership they encounter, what occupation they qualify for, and where they are assigned. ROTC students get a preview of leadership training early on in their careers, and can elect to serve at the end of a two-year trial period, wherein they take introductory courses on military science and leadership (Franke, 2000; Gold & Friedman, 2000). After two years, they can choose to commission and continue a military career. In contrast, those who enlist outside of ROTC must make the commitment without an extended initial trial period, and experience the military vetting process before they attend any training.

**Social support.** Social psychology has a long history of finding positive effects of social support on well-being. Social support is known to predict a higher rate of cancer remission, more positive affect and emotions, and buffer against the effects of trauma on psychological health (Bliese & Britt, 2001; Cohen, 2004a; Yalcin, 2014). Cohen describes three essential sources of social support: instrumental support, emotional support, and community integration. Cohen argues that instrumental support (support from leadership and organizations) is the least important of the three key factors. On the other hand, emotional support encompasses instrumental support, and Cohen describes community sources as more likely to provide all three types. Community integration, he contends, is the most versatile of the three. If one integrates with the community, then they can glean instrumental and emotional support from a wide range
of people. Therefore, community support has the power to supersede other factors. Additionally, community members have the ability to provide three distinct types of social support: tangible support, appraisal support, and emotional support (Cohen & McKay, 1984). Tangible supports refer to a support source that directly addresses the problem or stressor, such as providing financial help (tangible support from the military will be addressed in a future section on leadership and formal social support systems). Appraisal supports reduce the threat of a stressor, by making the stressor less problematic. Emotional supports make the individual feel loved and as though they belong (Cohen & McKay, 1984). Community integration has been shown to increase immunity to disease, reduce the risk of cardiovascular events, and buffer against general stress (Cohen, 2004a; Haber, Cohen, Lucas, & Baltes, 2007). Additionally, lack of belonging has been connected to perceived burdensomeness (a symptom of suicidal ideation in military veterans), and loss of desire for life (Lusk et al., 2015). For a population such as military service members that regularly suffer from heightened physical and emotional stress, community integration may be key to reducing negative outcomes.

Following interpersonal social psychology’s line of thought, the human experience is fundamentally interdependent. A person’s interactions with others is key to their well-being and overall experience (Kelley, 1979). Social support and perceived social support inherent in dyadic interactions create interpersonal dynamics within individuals’ lives, which have the potential to buffer against negative outcomes (Cohen, 2004a; Stets & Burke, 2000). Combat veterans have reported that social support buffers against psychological stress (called “combat fatigue” in earlier literature): especially when returning home to a society who saw their combat service as reprehensible or controversial to cultural values (Cobb, 1976; Grossman, 1996; Higate, 2001; Woodward & Jenkings, 2011b). The social environment at home during U.S. conflict thus has a
significant effect on how service members are received when they return home. When military service members take part, voluntarily or otherwise, in controversial war, they may find themselves blamed for perpetuating negative stereotypes of U.S. military conflict. Even under compulsory circumstances, veterans of these conflicts can sometimes internalize guilt and attempt to distance themselves from the war in which they partook, reducing self-disclosure and the likelihood that they will seek help for mental and physical ailments upon their return (Cobb, 1976; Grossman, 1996). As spoken in narratives in military conflict around the world, warriors from such generations concentrate on the relationships they formed while serving, and avoid discussions of engaging in theater operations, combat stories, and direct association with killing during their experiences (Cobb, 1976; Grossman, 1996; Hoyt et al., 2010; Woodward & Jenkins, 2011a). Instead, these former Armed Forces members speak of their deployments in tones of admiration for their fellow friendly combatants, travel abroad, and the unique skillsets they obtained during service (Bauman, 2008; Higate, 2001; Woodward & Jenkings, 2011b). Therefore, military service veterans seem to see the relationships they formed while in the Armed Forces as more important than many other experiences, and those relationships are difficult to match once they leave their service.

Power dynamics present in interpersonal relationships alter one’s relationship properties (Balliet et al., 2014; Fiske, 1993; Keltner, Gruenfeld, & Anderson, 2003a; P. K. Smith & Hofmann, 2016). In relationships where someone views themselves as superior to others, they will be less likely to self-disclose, more likely to see others as incompetent, and more likely to feel socially distant from others (French & Raven, 1959; Keltner, Gruenfeld, & Anderson, 2003b; Sturm & Antonakis, 2015). Power dynamics thus affect social support, insofar as internalized social distance from others prevents interpersonal relationships. According to
approach-inhibition theory, if individuals return from military service and see themselves as higher-ranked than the civilian networks they left behind, emotional and appraisal support might mean little from spouses and partners, friends, and family members once they return from military service (Keltner et al., 2003b). Also, service members may also feel restricted to relationships that correspond to their rank, branch, and occupation within their service, as those with experiences most similar to their own present the path of least resistance, and the potential for greatest connection. In combination with social comparison theory, power dynamics may explain why veterans struggle with community integration once they transition back to civilian life; they are fundamentally distant from their prior social networks, and have difficulty matching their experiences with other veterans around them. In the Army, 41.1% of deaths by suicide have been linked to work stress, but prior research on job-related stress and job strain has shown that one’s social support source must match to the social support one receives, such that job stress cannot be effectively buffered by a source that is not directly associated with one’s occupation (LaRocco, House, & French, 1980; Lusk et al., 2015). Despite the efforts of veteran organizations, the infrastructure to match veterans with others of similar service experience is complicated, and may be frustrating for those who have served. While this project will not specifically target this complex issue, future research would benefit from a more detailed investigation into the socioenvironmental factors that contribute to social support in current and former service members.

Finally, social and occupational identities create schemas for interacting with others in their perceived groups, which affect social support, power dynamics, and overall well-being (Haslam & Knippenberg, 2014; Stets & Burke, 2000; Tajfel, 2010). In the military personnel population, social support has been sparsely investigated in both active duty service members
and veterans of military service. U.S. service members see high rates of alcohol and substance abuse, symptoms of psychological trauma, and suicide (Hoyt & Duffy, 2015; MacLean & Elder, 2007; Ramchand et al., 2011). The suicide rate among service members and veterans is almost four times higher than in the civilian population, and the military spends between $6 billion and $7 billion per year on veteran mental health care alone, and shows rapid increase in populations that have never deployed (Golding, 2011; Hoyt & Duffy, 2015; Nock et al., 2013). Therefore, military service members who live on domestic bases seem to be currently be at highest risk for negative outcomes, and, coincidentally, are the ones who are most likely to show distrust in their military community (Bowen et al., 2003). Military bases are often set in geographically isolated locations. Bases with 50,000 or more residents have a median distance of 48 miles (\( M = 72.82 \)) from the nearest city with a population of 200k. Some examples include Ft. Drum, located far upstate in New York, Ft. Irwin located well outside of any city lines in the Monterey Desert in California, Ft. Bragg in Fayetteville in North Carolina, Ft. Hood in Texas, Ft. Knox in Kentucky, and Camp Blanding in Florida. Each of these military bases are sequestered from areas where military personnel could experience community outside of their installations, and are in areas that suffer from few public transportation options, and small overall populations. Low-ranking service members (with less than two years of experience) make less than $25,000 per year, which reduces the likelihood that these service members will have access to transportation and resources that allow for socialization outside of one’s post. Considering that lower-ranked individuals are more likely to live on-post, environmental influences such as geographic isolation and access to transportation creates the highest risk for these individuals. In fact, research on suicide in combat veterans has shown that isolation leads to emotional experiences commonly
found in suicidal service members, such as perceived burdensomeness, and perceived failed
social support (Lusk et al., 2015).

Research has shown that actual and perceived isolation are strongly related to one
another, and both are significant predictors of loneliness (Hughes, Waite, Hawkley, & Cacioppo,
2004). Involvement in one’s community has the potential to buffer against difficulties in home or
family life, poor work leadership, and gives options for emotional support from many sources
(Cohen, 2004a; Cohen & McKay, 1984; Haber et al., 2007). Unless military personnel can find
the emotional and community support they need from others housed on their military bases, the
locations of their bases alone place a barrier on access to alternative community integration.
Once again, it follows that environmental circumstances surrounding military service impose
boundaries to healthy outcomes in service members.

Isolation is only part of the environmental force compounded with U.S. military service.
As service members are geographically and socially disparate from their surrounding civilian
communities, they are also at the mercy of demanding occupational requirements. Military
service comes with a contract of ownership for the bulk of one’s time, and often does not fall
within typical employment standards for worker health and well-being. The Bureau of Labor
Statistics (2017) states that the average U.S. citizen spends 42.8 hours per week working. While
the Department of Defense does not collect data on how long their personnel spend at work,
most service members report that their days are longer than civilians, as they are often called to
handle issues outside of working hours (multiple officers, personal communication, 2017).
Contracting with the U.S. Armed Forces requires giving up many rights that civilians enjoy, such
as the option to take sick days, vacation days, and spend time with family at will. To begin to
understand the totality of the military environment, one must delve into the degree to which service members become integrated in the organization to which they belong.

**Greedy institutions.** Circumstances surrounding military service in the U.S. include geographic and psychological separation from social networks, and willingly risking life in the service of the country. Some researchers have argued that the military institution could be categorized as a “greedy,” institution (Segal, 1986; Vuga & Juvan, 2013). Greedy institutions are defined by the amount of time, social resources, and influence on interpersonal relationships the institution has on the individual serving within the organization (Segal, 1986). Organizations with high levels of greed for their members have a degree of direct control over their geographic movements, circadian rhythms, social networks, and family dynamics. Civilian occupations may provide ultimatum or consequences for refusing to relocate or mismanage sleep, but the civilian worker can decline these requests with minimal consequence. The U.S. military determines geographic assignment, regulates when its members sleep and wake, places restrictions on the types of social networks one has access to, and may disrupt family processes, such as marriage and child-rearing; the consequences for refusing direct orders include, but are not limited to, physical punishment, demotion, and dishonorable discharge. In contrast to civilian occupational requirements, military service members often do not have the option to decline requirements set force by the U.S. military, and instead must comply or face court martial for their disobedience. While these consequences can be severe, military personnel agree to conditions set forth by the Department of Defense when contracting for their service, and presumably understand the risk inherent in disobedience.

Very little research has assessed the level of “greed,” within the military institution. If the U.S. military does qualify as a greedy institution, this further exacerbates the pervasiveness of
military identity in a reciprocal dynamic. Being a serviceman or woman places an individual within the confines of an organization to complete or near-complete control over their lives, which is suddenly released at the end of military service. As long as service members maintain their contractual obligation within the Armed Forces, the Department of Defense holds significantly more control over their daily lives than typical American employers do. However, service members willingly volunteer to have these barriers placed on their living conditions, which somewhat violates the definition of a greedy or total institution, insofar as the service member is not unwittingly placed under controlled circumstances (Segal, 1986; Vuga & Juvan, 2013).

Due to the Department of Defense’s intensity of control over service members’ daily lives, it follows that one might struggle to release a military identity after one’s service is complete, and may explain much of the anxiety associated with ending military service and transition difficulties when reintegrating into civilian life (Higate, 2001; Vuga & Juvan, 2013). An all-encompassing occupation inhibits potentially superseding identities that less invasive civilian occupations have the capacity to offer (Ashforth & Mael, 1989). Additionally, the nanny-like control the military has over service member’s lives may lead them to feel less capable of independent coping (Army LTC, 2016, personal communication). Anecdotally, some military service members regard their commanders as parental figures, and the organization as a nanny who looks after their well-being, and delivers punishment for violations of behavioral protocols. Personnel accustomed to this environment over years of service may become ill-equipped to take on a less totalitarian identity in their transition to civilian life, as evidenced by behaviors veteran service members maintain long after they leave their occupations (Ahern et al., 2015; Bauman, 2008). Interactions with leadership have the potential to alter how one adjusts both to military
life while in the Armed Forces, and how one manages hierarchical interactions once they exit the military.

**Leadership and power.** Individuals who are part of a legitimate hierarchy function as a more efficient group with higher morale and cognitive speed (Boehm, 2009; Ronay, Greenaway, Anicich, & Galinsky, 2012). Legitimate hierarchies are defined as those who have leaders who follow their own moral requirements, those that promote positive interactions between leaders and subordinates, and those that have a balance of power between leaders and subordinates, such that there are a balanced number of leaders and subordinate individuals (Boehm, 2009; Nir Halevy, Chou, & Galinsky, 2011; Lammers, Stapel, & Galinsky, 2010). On an evolutionary basis, human beings seem designed for some individuals to hold power while others follow. Tribal communities with effective leadership are more likely to survive as a whole, and the skills, threats, and benefits of proper leadership evolved to satisfy the conditions of community well-being in pastoral and contemporary societies (Boehm, 2009). It could be argued that the military evolved from the warrior subsector of early society, and its current power structure and dynamic is a result of thousands of years of honing to create the current military machine. The ease with which individuals fall into hierarchical structures, such as military ranks, at least suggests that people are designed for these structures. It follows that military leadership must fulfill the duties to perpetuate subordinates’ success. One key component to leadership is interpersonal skill: especially in the military’s closed social network.

The U.S. military requires strong leadership to perpetuate a wide array of U.S. interests, from the typical combat theater to intelligence-gathering, logistics, peacekeeping, training, and ambassadorship to other nations. Power within the military context is absolute authority; with a military contract comes the acceptance that those who are of higher rank have control over
nearly every aspect of one’s life, including where they will live, what occupation they will hold, what and when they can eat, sleep, shower, or see their families. There are few other U.S. occupations where one’s superior has such control over their employees, and these requirements come with significant risk.

It is within the military context that the importance of power balance becomes especially critical. Leaders in the U.S. military must demonstrate good leadership characteristics, as questioning the legitimacy of a leader’s power puts not only the leader, but the entire group at risk. Additionally, instrumental support, or direct support from organizational leadership, may be an important component in ensuring well-being for service members (J. Ben Barnes, Nickerson, Adler, & Litz, 2013; Welsh, Olson, Perkins, Travis, & Ormsby, 2015; Wood, Foran, Britt, & Wright, 2012). Therefore, military personnel are especially vulnerable to toxic leadership. Leaders who cannot adequately function as role models and support for their subordinates can actively damage the well-being of lower-ranked individuals.

Toxic leadership is specifically defined as when a leader has little to no regard for their subordinates (Reed, 2004). Toxic leaders have the potential to spread their toxicity to future leaders in the military, thus perpetuating the cycle of poor instrumental support. Subordinates who have poor experiences with toxic leaders are less likely to want to remain in the military, and the Department of Defense has outlined protocols to try to limit poor leadership within military teams (Reed, 2004; Reed & Olsen, 2010; Williams, 2005). While the Department of Defense is primarily interested in leadership to reduce attrition, leadership takes a central role in most service members’ experiences, and therefore has a large impact on social support needs for many enlisted personnel (Fink, Gallaway, & Millikan, 2014). Considering that service members’ primary points of contact are other service members and the leaders they serve under, it would
follow that the military would be more interested in improving leadership experiences and perception. While this project will not directly assess leadership as a social support factor, it is worth noting that leaders are a large part of military social factors, and may be captured in social support measures that assess military service members perceptions of community support.

Indirectly, cohesion can be considered a measure of leadership support, as one will feel more aligned with their group under better leadership (Shamir, Zakay, Brainin, & Popper, 2000). Cohesion is a special subset of social support for military service members, as military service members have limited access to the groups they can connect with during their service contracts for reasons aforementioned.

**Cohesion.** Unit cohesion is slightly better addressed than social support in the military personnel literature. Cohesion can be considered a subset of social support, offering instrumental and emotional support in a military context, though this connection has not been directly addressed in the literature. Also, one can assume that the military unit provides a sacrosanct group with which one shares a social identity, creating the potential for closer social engagement in military personnel given shared values and interest in military service. Military personnel often discuss their unit members as even closer than family, due in part to the harsh conditions and their reliance on one another for their immediate safety (Ahern et al., 2015; Britt et al., 2006; Frederick, 2010; Grossman, 1996; Higate, 2001). Service members who are part of elite military groups show stronger group cohesion than members of the general population, and members of military “A-teams,” show even greater cohesion with no significant differences in personality traits (Fullerton, 1988). Additionally, research on members of these military groups show cohesion has a strong relationship with well-being and interpersonal relationship satisfaction, indicating that cohesion within the occupational group has a somewhat different effect on service
members than civilians (Fink et al., 2014; Fullerton, 1988; Griffith, 2015; Severt & Estrada, 2015). Additionally, research shows that unit cohesion has a larger impact on well-being than general social support (in effect size) in military personnel (Fink et al., 2014; Foran et al., 2011; Mitchell, Gallaway, Millikan, & Bell, 2011, 2013). Members of military units have few sources they can depend on for support, so the degree of closeness they have with their military group may have a greater impact than work groups in civilian work forces, insofar as civilians have more choice and fluidity in their available support networks such as communities and family (Cohen, 2004b). Additionally, military groups are pre-screened in recruitment requirements, in that U.S. service members voluntarily join the Armed Forces, and therefore have some underlying values that support such a choice and must pass rigors in service requirements.

Those who are unable to fully conform with military values due to a competing identity suffer from poor social support and cohesion in their military groups, and as a result, receive lower ratings on performance reviews and a lessened chance for promotion and mobility within their rank (M. L. Barnes, 2007). Ultimately, the level at which one can connect with their military group impacts one’s experiences as a military service member, and impacts how one connects with others when they transition back into civilian life.

It is also possible that unit cohesion can be somewhat of a detriment to military personnel after they exit the service, as they are unlikely to keep contact with their personnel units after transitioning back to civilian life. Grossman (1996) describes that since Vietnam, veterans have been less apt to maintain brotherhood with their fellow soldiers, instead steering away from that type of social support and attempting to return to their old family and friend networks. The closeness that military personnel feel when they are enlisted seems to protect against combat exposure, but is lost when service is complete (Cobb, 1976). Some researchers have argued that
veterans maintaining friendships with others who are military-affiliated may be a primary buffering effect against the sometimes harmful outcomes former service members face upon exiting military service (Demers, 2011; Hinojosa & Hinojosa, 2011). That is, friendships with civilians are not cohesive enough for veterans to benefit from buffering effects once they return to civilian life, as those connections are vital to fulfilling one’s military identity, understanding mutual experiences, and reducing stigma in help-seeking behaviors (Cohen & McKay, 1984; Estrada, 2017). Additionally, a former service member must have access to other military veterans with similar experiences (e.g., an Army combat helicopter mechanic may be ill-matched with a Navy medic). The military family becomes a key component to integrating back into civilian life, especially for lower-ranked individuals. However, military connections can create distance between a former service member and the social networks they return to, with family members and friends who do not understand the need for such connection with what they view as a former life (Hinojosa & Hinojosa, 2011). The relationship between experience, identity, and cohesion with other military-affiliated individuals may be reciprocal, in that service members and former personnel require the connection with those who have had similar experiences, share a similar identity, and do not require disclosure about the more sensitive topics that come with serving in combat or combat support roles during service.

Unit cohesion’s powerful effect may be one explanation for the rising suicide rate in soldiers who do not deploy. While soldiers in combat are trained together, spend more time together, and interact more with leadership, those who are not deployed have what could be perceived as menial desk jobs, base janitorial duties, kitchen work, or other domestic duties unfit for someone with a strong military identity and desire to fight. Research on service members in the Israeli army demonstrates this idea; men who were shouldered with more domestic duties and
deemed unfit to fulfill the ideal combat soldier role saw far less connection with fellow service members, and instead concentrated on their relationships with friends and family back home (Sasson-Levy, 2003b). In this way, unit cohesion and military identity may interact with one another, removing the buffering effects of unit cohesion for individuals with strong military identity who never fulfill their understood duty as warriors. At least one study has found that social support and unit cohesion are unique elements in the military population; service members see cohesion with their military units as more valuable than perceived or objective social support from individuals who are not part of their military group (Griffith, 2015). While service members may receive social support from their military group, there is evidence that cohesiveness must be separated from otherwise defined social support from interpersonal and community sources. Voluntary service members who still have some of the experiences of military service, but cannot fully identify as the personified combat soldier may have a greater disconnect both from civilian confidants and other veterans. They may find themselves unfitting in either category, and thus perceptually lesser than both.

Despite the initial research findings, more research must be completed in order to manage antecedents of cohesion in military groups. Scholars have argued over how to appropriately define cohesion within a military context, as it is been defined separately in performance and resilience studies (Castro & Adler, 2005; Severt & Estrada, 2015). Cohesion as a subset of social support is primarily discussed in terms of performance with organizational groups, such as military battalions and training groups, but well-being, internal values, group commitment, etc., have not yet been examined (Estrada, 2017). Future research could tackle gaps in literature to properly define cohesion in the specific military environment.
Military culture. Service members who live on-post, are deployed on training missions and in combat and combat support roles, and individuals who serve for career terms become entrenched in a special subset of their organization’s culture. The U.S. military has a subversive culture of warriorism and individualism, which requires its members to maintain peak physical fitness in defense of their country while foregoing help-seeking behaviors against harsh environmental conditions (Bowen, Jensen, Martin, et al., 2016). In combination with trait and state factors, the overarching understanding of the military service member is an individual with strength, integrity, accountability, and hardened individualism. This worldview is reflected in the Army’s core values: loyalty, duty, respect, selfless service, honor, integrity, and personal courage. An overarching concern in military well-being shows that some military values are in direct conflict with seeking help when problems arise. In addition, masculinity inherent in military culture and rewarded within the military environment further exacerbates change to the system, is generally rebuffed by leadership, and will require intervention on a more systematic level (Bowen, Jensen, Martin, et al., 2016; Britt et al., 2006; Fallesen, Keller-Glaze, & Curnow, 2011). The current project seeks to interpret military relationships and identity’s impacts on well-being given the military’s dominant cultural components. A pinpointed investigation in how social factors work within the military environment should provide clearer predictors for resilience in future studies.

Measurement

In order to manage the complex interplay between a wide assortment of personal and environmental variables within a military population, one must create a system of measurement that adequately captures as full a picture as possible in this unique population. The social sciences suffer from degrees of valid measurement to assemble pieces of the social puzzle, in
part due to the astronomical number of variables inherent in human behavior research. Often, similar variables are assessed differently, making comparisons between studies difficult or impossible. Military identity, social support, unit cohesion, and well-being all have wide measurement diversity, with many of these variables assessed with constructed surveys in the military population and without proper validation. Measures are available for military identity, social support, and cohesion that can easily be adapted to a military-affiliated population, though most have not benefited from current psychometric techniques.

**Measuring social support.** Studies that examine social support in military personnel do not seem to have a standardized method of measuring social support as a variable. The *Multidimensional Scale of Perceived Social Support* (MSPSS) is considered the most effective measure of the social support variable in the general population (Canty-Mitchell & Zimet, 2000; Dahlem, Zimet, & Walker, 1991; Zimet, Dahlem, Zimet, & Farley, 1988; Zimet, Powell, Farley, Werkman, & Berkoff, 1990). The measure utilizes cognitive perception of social support rather than objective support, which seems to be a more important value in determining how well one’s social support networks impact their well-being (Cohen, 2004a; Zimet et al., 1988). That is, objective social support paints a picture of the value of one’s social network in how many resources are actually available to an individual from their interpersonal contacts, but perception of how many resources one has determines what level of support an individual may seek from their connections (Haber et al., 2007). However, most literature on social support in military personnel use other methods, such as the *Deployment Risk and Resilience Inventory* (DRRI), and one-iteration constructed measures of social support that had not been validated for the population (King, King, Vogt, Knight, & Samper, 2006). The popularity of the DRRI is likely due to its mandatory application in military personnel prior to deployment, so researchers have
quick, easy access to the data. The DRRI was constructed as a measure to predict Post-Traumatic Stress Disorder symptoms prior to and post-deployment, with emphasis on social support items both before and after deployment (King et al., 2006). When comparing psychometric construction of these two scales, both evaluations are outdated. However, evaluation of the MSPSS includes a factor analysis and tests of communality between factors, which the DRRI lacks. Therefore, the MSPSS is a more psychometrically valid measure of social support than the items of the DRRI relevant to the variable, and provides a better determination of the degree to which one’s social support network is valued and utilized for the purposes of the current study. In research on social support’s effects on military personnel well-being, the MSPSS is used rarely, while the social support items that comprise the DRRI are used much more frequently. More troubling, social support is most often measured through one-iteration constructed measures with no psychometric properties evaluated, which places concerns on the construct validity in those studies. Ultimately, social support shows an overwhelming positive relationship with well-being in both active-duty soldiers and veterans, but conclusions are uncertain given the measurement properties of the scales researchers use.

**Measuring cohesion.** Cohesion is closely related to instrumental support in the military population. Unit cohesion within military groups is akin to instrumental social support Cohen (2004b) initially describes in his paper on the importance of social variables on stress reduction, as military personnel work closely with their leadership and dependencies on their fellow servicemen, and may have some part in emotional support, due to the intense combat nature of some operations and the powerful integration capabilities that groups face when they depend on one another for their lives. Combat theater has been repeatedly addressed as one of the most intense bonding situations between groups, with combat units expressing that they love their
platoon more than family or friends (Britt et al., 2006; Frederick, 2010; Grossman, 1996; Woodward & Jenkings, 2011a). Additionally, cohesion within veteran groups corresponds with community integration, as one’s military identity often follows them after their service is complete (see Higate, 2001). Unit cohesion in military personnel is generally measured as a derivative of occupational or leadership support (Fink et al., 2014). As with social support, unit cohesion has no standard of measure in military personnel, and is instead assessed with constructed questionnaires or revised versions of military surveys. While unit cohesion repeatedly predicts higher well-being in soldiers, due to the poor nature of psychometric evaluation, we cannot be certain of the constructs derived from these studies. Additionally, cohesion is a somewhat amorphous variable in the literature as a whole, with uncertain antecedents with other valuable social factors (Estrada, 2017). As such, a cohesion measure that directly assesses group closeness as a manifest construct may be better suited to determine the degree of relationship of cohesion with other social factors until a better, targeted measure can be developed.

**Measuring military identity.** Military identity is an assumed variable in much of the research in military personnel, frequently assessed via qualitative interview techniques and general interpretation of alignment with military values (see Vest, 2013). However, one group of researchers worked to parse out personality and interpersonal variables that contribute to alignment with a military occupational identity distinct from civilian, work, and other social identities (Johansen et al., 2013a). While one may mistakenly assume that military identity corresponds with a pure work identity, alignment with military values has the potential to supersede all other social identities due to long work hours, military personnel’s tendency to work on the base where they live, and the nature of military work as a whole (Segal, 1986; Vuga
& Juvan, 2013). However, military identity as a unique set of factors has only been examined in a Norwegian military context (Johansen et al., 2013c). To combat the scattered research in military identity, the military identity scale must be validated for use in a U.S. military sample.

**Research Justification**

In the U.S., the military suicide rate has steadily climbed since 2001, reaching beyond civilian levels in 2008 (20.2 per 100,000) in active-duty personnel (Kuehn, 2009; Schoenbaum et al., 2014). The veteran suicide rate is even higher at 35.3 per 200,000 as of 2014 (Thompson, 2016). Previously, researchers believed that the high suicide rates among active-duty soldiers and veterans were due to combat and extreme conditions exposure; however, more recent research has demonstrated that deployment and combat exposure do not predict suicide, and that non-deployed personnel are sometimes at even higher risk than deployed personnel are (Schoenbaum et al., 2014). Therefore, there is evidence against the image of the damaged soldier returned from war. If harsh conditions and combat are not predictive of suicide, then there must be other factors which contribute to the rapidly rising numbers of suicides during and after military service in the U.S. In accordance with Lewin’s (1939) original equation, determining the interplay between personal and interpersonal, environmental factors can form a better interpretation of what actually occurs within the military experience. The author is not aware of any prior research that combines identity, social support, and cohesion as determinants of well-being.

**Comprehensive Soldier Fitness Program.** In 2007, the Army awarded a no-bid contract with researchers at the University of Pennsylvania to create a comprehensive program which would increase resilience and potentially reduce the increasing number of suicides and corresponding mental health issues in their soldiers called the Comprehensive Soldier Fitness Program (CSFP) (Casey, 2011; Hastie, Tinsley, & Barnow, 2014). The program embodies five
basic dimensions, including social, emotional, spiritual, and family factors (Casey, 2011). Within one month of enlistment, servicemen and women enter the program, where they are required to attend at least one hour per month of training in the five dimensions. The training is led by a Master Resilience Trainer (MRT), who provides instruction on concepts such as “Hunting the Good Stuff,” “Active Listening,” and “Meditation” (MRT Resources Center, 2014). This one hour of training per month includes testing and an interactive workshop. MRTs are trained by higher level MRTs (MRT3 or MRT4) to disseminate the information in the entirety of CSFP to lower-ranked soldiers (SFC, personal communication, 2016).

CSFP was derived from the Pennsylvania Resilience Program (PRP), which was originally designed to reduce depression symptoms through school programs in young children through a peer-trainer method (Gilham, Jaycox, Reivich, Seligman, & Silver, 1990). In a meta-analytic study of the original PRP, researchers found that while the PRP did seem to reduce symptoms of depression for 1 year post-intervention, no evidence was found that it was significantly better than other suicide prevention programs, and in some instances, performed no better than control groups who received no intervention (Brunwasser, Gillham, & Kim, 2009). In 2008, PRP was adapted into CSFP, and deployed for use throughout the Army (Casey, 2011; Seligman & Fowler, 2011). Unfortunately, the author could find no independent evaluation of the CSFP, or any scholarly evaluation of how the authors translated PRP concepts into a program compatible with military service members. Propriety or internal evaluation may exist that are unavailable to the author.

While CSFP may have some value, some researchers describe its implementation and methods as flawed. The only study conducted on the effectiveness of CSFP uses non-deployed soldiers who did not complete CSFP as their control group, and deployed soldiers who did as
their experimental group (Lester et al., 2011). Additionally, this study was done in connection with the Department of the Army, highlighting potential conflicts of interest in the study’s implementation and reported results. As previously stated, non-deployed soldiers are beginning to exceed previously-deployed soldiers in their suicide rates, indicating that there is a fundamental difference with this population and eliminating the validity of making comparisons between the two (Schoenbaum et al., 2014). Deployed soldiers experience the very “band of brothers,” situations that are so vital to group cohesion and instrumental and social support in military teams, so those groups are more likely to have the resources to prevent psychological trauma despite their often difficult and terrifying positions at war (Grossman, 1996). Also, CSFP’s effectiveness was measured through the Global Assessment Tool, an adaptation of the Global Assessment of Functioning (GAF), which does not assess clinical depression, PTSD, suicidality, alcohol or substance abuse: all outcomes that the CSFP was supposedly designed to reduce (Eidelson & Soldz, 2012; Peterson, Park, & Castro, 2011). Additionally, Eidelson and Soldz (2012) warn that other, similar resilience measures performed on civilian populations have shown to increase risk for suicidality, since they create a stigma against those who have been trained for resilience but still need help. Considering the hegemonic masculinity present in the military, having training to resist negative effects of military work and being unable to handle the stress may place soldiers in a very uncomfortable, and dangerous, mental state. Additionally, the PRP from which CSFP was derived is designed to reduce depression symptoms in young children and adolescents already diagnosed with clinical depression. Both the mode and delivery method of CSFP are fundamentally different from the PRP’s origin, which places greater doubt on the how effective CSFP is in preventing negative outcomes in service members.
While CSFP may create some relief for soldiers, the lack of evidence in its effectiveness in combination with the continually rising suicide rate in the military since its deployment reduces potential validity for the military’s solution for preventing clinical depression for its soldiers. Without a more thorough analysis of the components of CSFP, it is uncertain whether the military’s effort to reduce stress in military personnel is enough. However, it is not within the scope of this project to assess CSFP, but to acknowledge that this program has been in place for many years in attempt to mitigate negative outcomes in military personnel to no known effect. In fact, even CSFP creators acknowledge that the program is a pilot meant to evolve with the changing nature of military service, and that continual reassessment of the program is necessary to maintain relevance as new means of assessment and intervention are reviewed and applied to the military population (Cornum, Matthews, & Seligman, 2011; Peterson et al., 2011). No recent public CSFP evaluations are known at time of writing, nor are there publicly available reports of reassessment or alteration of the program as originally suggested.

**Prevention versus treatment.** Health psychology has a 30-year long history of demonstrating the importance of preventative factors in both physical and mental health (T. W. Smith, Orleans, & Jenkins, 2004). While health psychology acknowledges how important research in treatment interventions can be in reducing premature mortality, the field also recognizes that research into preventative factors, and interventions created from that research has greater longevity, lower cost, and greater efficacy for long-term solutions (Lotion, 1991; T. W. Smith et al., 2004). Additionally, health psychology acknowledges that approaches should tackle health issues from a multifaceted standpoint: focusing on cognitive, social, and biological components in collaboration with experts in those respective fields to create the greatest impact (Lotion, 1991).
Extensive research has been done on treatment and intervention programs for soldiers and veterans with PTSD, clinical depression, and other forms of psychological trauma, which is vital for those who seek mental health assistance. However, mental health treatment is highly stigmatized in the military for an assemblage of reasons. First, some mental health diagnosis may result in a medical discharge or reassignment to an undesirable post: especially those that result in prescriptions psychoactive medications (Britt et al., 2006). Some diagnoses that may result in prescriptions for psychoactive medications include treatment-resistant depression, PTSD with psychotic features, and bipolar disorder: all diagnoses more prevalent in the military community than in the general population (Averill et al., 2015; Nelson et al., 2011). Also, seeking help for mental health issues has long been considered an emasculating act in the U.S., and the military is well-known for its hegemonic hyper-masculinity (Hajjar, 2014; Higate, 2001; Skopp et al., 2012). Therefore, research into preventative measures to increase resilience and combat clinical depression may be a useful workaround given mental health care resistance and the fundamental difficulties in creating programs mean to treat current and former military members. The Army in particular acknowledges that service members resist interventions that target mental illness, and that disguised interventions that focus on well-being and hardiness in the service member population may be better avenues to circumvent the internal stigma of seeking psychological help within the military community (Cornum et al., 2011; Lester et al., 2011; Peterson et al., 2011). Indeed, this concept is the driving force behind CSFP as a leadership and resilience training mechanism with emphasis that one can turn to leaders in times of crisis or concern.

Social Factors as Prevention

Social support has long been shown to combat stress, PTSD, and clinical depression (Cobb, 1976; Cohen, 2004a). Along the same lines, cohesion has been shown to increase post-
traumatic growth, strengthen resilience, and reduce stress (Booth-Kewley et al., 2013; Cohen & McKay, 1984; Fullerton, 1988; Mitchell et al., 2011) However, to the author’s knowledge, cohesion and social support have not been linked in terms of their health benefits. While recent studies in health psychology have continued to examine social support and cohesion, both continue to be viewed as orthogonal constructs (e.g., Fraser & Spink, 2002). On the surface, one would think that the link between cohesion and social support are connected, but thus far, the author has not located any research specifically linking these two variables. The current study will seek communality between these constructs, in addition to relationships with military identity and well-being.

The current literature does not piece together the many possible preventative social factors of negative outcomes in the military population. While individual features, such as social support, cohesion, and military social identity have individually shown promise in predicting well-being in military samples, no known prior research has combined these components into a collective model. Considering the persistent military culture and tendency to avoid treatment for mental illness, social factors that can serve as buffers against clinical depression and trauma disorders may be the key to reducing suicides in military personnel.

Together, this project seeks to identify the strength of social support, unit cohesion, and military identity in predicting well-being, and to establish a model that illustrates how these social factors are connected in the military environment. As a proof-of-concept, the researcher first examined connections between military identity, cohesion, and well-being to demonstrate if these constructs fit into a unified whole.
Pilot Study

Pilot data to show proof-of-concept for this project was collected from Reserve Officer Training Corps (ROTC) students and student-veterans from two Northwestern universities. The pilot study provides evidence for proof-of-concept from the sample in unit cohesion and military identity’s effects on well-being in early-career soldiers and veteran military servicemen.

Methods

Military identity, unit cohesion, and well-being were assessed through Internet questionnaires that have shown high reliability and validity in other contexts.

Participants. Participants were recruited from university ROTC units through senior cadets, who emailed the survey to other cadets in their cadre ($N = 38$). Veterans were recruited from university Veteran’s Affairs Committee Coordinator via listserv, and the link posted on the VAC’s Facebook page ($N = 58$). The average age for all participants was 29 years old (see Appendix A for specific demographics).

Apparatus. Surveys were distributed and through Qualtrics online survey software licensed with Washington State University for faculty, staff, and student use. The Qualtrics software was set to anonymous data collection (i.e., IP addresses were not logged) from those who completed the survey. Qualtrics is one of the most secure survey platforms available, and is widely used in business for collecting confidential customer data.

Subjects complete the surveys on the personal device of their choosing once clicking on the emailed link. Data are password-protected and can only be accessed from the Principal Investigator’s account.
Materials. Military identity, unit cohesion, and welfare are all be assessed via previously validated measures. Additionally, we assessed military and civilian social network through other, individual items.

Demographics. A demographics questionnaire asking gender, age, race, academic status, marital status, branch of military intending to serve (for ROTC students) or served (for veterans) was used.

Military history and network. Personal military family legacy and ratios of one’s social network associated with the military were asked in a 19-item measure. Examples of items include “How long did you aspire to be a soldier before you joined the U.S. military?” and “How many people you were close to in high school are currently associated with the Armed Forces?” (see Appendix B for measure).

Military identity. An altered version of (Johansen et al., 2013a) Norwegian Professional Identity Scale (NPIS) on multiple ROTC branches and veterans to determine the effectiveness of the scale in a U.S. population. Some questions were reworded or removed to correspond to U.S. military language as appropriate. The scale uses a 7-point Likert-type response system (1 = totally disagree; 7 = totally agree) to assess one’s alignment with a number of military values at time of service.

Social support. In this initial data collection, social support was assessed through questions about family military history and questions about military-affiliated social networks. For example, one item asked participants, “Have any of the following members of your family served in the Armed Forces (check all that apply).” (Yes – mother, Yes – father, Yes – grandmother, Yes – grandfather, Yes – older brother, Yes – older sister, Yes – younger brother, Yes – younger sister, N/A). For the legacy question, a total number of family members was counted to
produce a final number of family members who served. Another item asked, “How would you classify your current social network of friends (military-associated can include currently or formerly enlisted, retired, or in civilian service to any branch of the Armed Forces)?” ($1 = all military-associated to 10 = all civilians$). ROTC-coded questions had changed wording to correspond to high school and ROTC-associated networks.

**Unit cohesion.** Hornsey, Olsen, Barlow, and Oei’s (2012) one-item visual scale of group cohesion was administered to address cohesion with one’s ROTC unit for cadets, and global veteran cohesion as well as cohesion with one’s self-reported veteran groups (see Appendix B for measure).

**Well-Being.** Hills and Argyle’s (2002) 29-item Oxford Happiness Questionnaire was administered to assess state well-being. The questionnaire uses a 6-point Likert-type response system ($1 = strongly disagree; 6 = strongly agree$) to determine the respondent’s well-being at time of assessment.

**Procedure.** Participants were recruited through the senior cadet of the ROTC cadre at or the department’s secretary. Commanders were not permitted to distribute the survey to avoid undue coercion to contracted cadets, for whom an email requesting survey participation may have been construed as an order. Veterans were recruited through the Veteran Affairs Committee (VAC) Coordinator, who launched the survey link to all self-identified campus veterans via their listserv. The VAC Coordinators also posted the link on the VAC Facebook page. All participants completed the questionnaires via online Qualtrics survey. Most ROTC students completed the survey from lab computers at the author’s home institution, while the remaining participants completed the survey using their own personal devices.
Results. A total of 103 responses were collected, but six participants did not consent to complete the survey, leaving a total of 97 responses. Thirty-eight ROTC cadets (M age = 20yrs, SD = 1.6) and fifty-nine self-identified student-veterans (M age = 34.6yrs, SD = 9.9) responded in full to all measures (see Appendix A for demographics table).

Measurement reliability. The NPIS showed acceptable overall internal reliability (α = 0.614), with subscales showing lower reliability (Idealism α = 0.496; Professionalism α = 0.712; Individualism α = 0.554). For the final model, military identity was averaged across participants rather than divided into factors due to low reliability of individual constructs. The Oxford Happiness Questionnaire showed excellent internal reliability (α = 0.938). Cronbach’s α is considered a reasonable substitute for full reliability coefficient analysis if the data can be considered normal (Raykov, 1997).

Correlations. How long ROTC cadets had aspired to serve correlated with well-being (r = 0.395, p = 0.021), but this relationship did not appear for student-veterans. The Individualism and Professionalism factors of the NPIS correlated in the ROTC cadre (r = 0.357, p = 0.035), but not in student-veterans. Cohesion was positively related to how many family members (legacy) had served in the Armed Forces for ROTC cadets (r = 0.390, p = 0.021). Legacy was also related to how many individuals in ROTC social networks are military-affiliated (r = 0.440, p = 0.008). Among veterans, Idealism correlated with both cohesion with one’s voluntary veteran group and cohesion with all military veterans (r = 0.308, p = 0.025; r = 0.392, p = 0.004). The number of military-affiliated individuals veterans associated with was also positively related to well-being for vets (r = 0.320, p = 0.021).
**Social support and well-being.** While several items in the military network and history questionnaire drew on social support themes, none of these produced predictions of well-being in the current sample.

**Unit cohesion and well-being.** In veterans, cohesion with one’s voluntary veteran group accounted for 14.9% of the variance in well-being ($r^2 = 0.149, \beta = 0.231, p = 0.005$), but cohesion with all military veterans was not a significant predictor of well-being.

**Military identity and well-being.** In the ROTC cadets, Idealism accounted for 21.1% of the variance in well-being ($r^2 = 0.211, \beta = 0.645, p = 0.006$), but cohesion did not hold as a predictor for well-being in veterans.

**Discussion.** The results of the pilot study provide some initial insight into characteristics of ROTC cadets and campus military veterans. First, factor reliability within the NPIS was poor. However, one major purpose of the full study is to evaluate the validity of this measure in a U.S. population. Other initial analysis suggest support for the hypothesis that social support is a large contributing factor to well-being in both ROTC cadets and veterans, which may easily transfer to similar conclusions in enlisted soldiers. Global veteran cohesion and veteran group cohesion were both related to well-being in the pilot sample, indicating that cohesion may play a bigger part than social support in those who have experienced combat with their fellow military personnel. In this initial study, social support was not a significant predictor of well-being in either veterans or ROTC cadets. However, for veterans, group and global cohesion were significant predictors, indicating the importance of having a group whose social identity aligns with one’s own. The lack of significant differences between ROTC cadets and campus military veterans suggests that the training experiences cadets have are comparable with military service, at last at WSU’s ROTC program.
Limitations of the initial study. Several issues appeared in conducting this initial study. First, the researcher received an email from one veteran participant explaining that the NPIS was difficult to respond to due to its current wording. Since the scale is geared towards current military service, veteran participants suggested that the wording be changed to reflect one’s past values rather than current identity. This issue may have contributed to the low internal reliability found in this initial study. Considering the untested nature of this survey, additional work on the measure will need to be completed before it will be completely ready for use. Second, I performed no formal evaluation of social support in ROTC cadets and campus veterans, such as the Multidimensional Scale of Perceived Social Support. Therefore, it is no surprise that social support items did not have a relationship with well-being in the current sample. The social support questions used in the pilot study were tailored to a military population, but a better validated measure should be used to examine relationships of predictive power for cohesion and social support. Third, participants were difficult to gather for this first trial. The sample size in the pilot study was quite small, and certainly not large enough to establish final conclusions on this measure. Contemporary psychometric techniques cannot be performed at the item-level with a small sample, so further analysis of the scale will reveal its use in the U.S. context. ROTC commanders must first agree to distribute the materials to their cadets before this population can be accessed. Then, the researcher must meet in person with commanders to explain the full nature of the study and assure them that results will not be publicized without their permission. The military is hesitant to provide outsiders with access to their population, and it could be argued that ROTC commanders are even more protective, since they see their cadre as not only future soldiers, but also their students. The military also has an unfortunate history with the social sciences community, which makes access difficult. It is unsurprising that this initial
investigation was unable to find links between social support or unit cohesion and well-being in the ROTC sample, considering the very small number of cadets who participated. ROTC cadet access is limited, but the researcher is working on more points of contact to increase numbers for this population. Finally, the pilot study only accessed WSU ROTC cadets and campus veterans, limiting the scope of a full picture of the variables of interest. Many ROTC cadets start their careers in their home states, and student veterans are a paltry subsample of the entire veteran population. A larger investigation will uncover a clearer picture of military personnel on a national scale. Finally, the researcher received personal feedback from campus veterans stating that the wording of the NPIS did not correspond to many veterans’ feelings about military service, since it used current language as opposed to asking veterans how they felt about the military when they started this service. This potential systematic bias may have reduced the reliability of the scale, and was adjusted for veterans in the next study.

In order to manage some of the biases and complications that arose from the pilot study, the larger study includes multiple military-affiliated groups, as well as validates the NPIS.

**Hypotheses of the Current Study**

Drawing on conclusions and issues from the pilot study, it is clear that military identity and cohesion both likely play a relational role in well-being in military-affiliated individuals. From substantial investigations in the effects of social support on well-being in the military population, it is clear that social support has the potential to impact the military population within an interdependence framework. In addition to military identity and cohesion, social support should mitigate some of the issues seen in the pilot study, as social support can add to the predictive power of social factors for well-being in the military context.
For this expanded project, the researcher hypothesizes that (a) military identity will have an indirect impact on well-being through cohesion, as shown in the pilot data, and (b) social support will have an impact on cohesion and/or well-being. Additionally, the current study seeks to determine the validity of the NPIS as a scale to measure military identity in early career service personnel, and veterans and retirees of military service.
CHAPTER TWO: METHODOLOGY

Method

The current study seeks to unify theories of interdependence, social support buffering hypotheses, and identity, to validate the NPIS in an appropriately large sample, and create a model for these variables’ effects on well-being for military-affiliated individuals using anonymously collected survey responses. In order to gain the best possible picture of social factors within a military population, members of the Reserve Officer Training Corps (ROTC), and veterans both from student and international organizations were included.

Participants

A national sample from several university ROTC cadres, student-veterans, and other national veteran organization members comprised the 141 participants in the study. Each group’s demographics are split into Table 3 in Appendix D. ROTC cadets were recruited via email link distributed by civilian employees within military science departments. Student-veterans were recruited via listserv emails. Veteran organization members were recruited via email from email lists available within their respective veteran organizations. It should be noted that the author confronted significant challenges in data collection, including two major hurricanes, misinformation regarding proper procedures for collecting data from cadets, recruitment drop-outs, and a cease-and-desist request from U.S. Cadet Command. The hurricanes caused many potential respondents to deploy as part of disaster relief assignments and volunteer service efforts, and directly impacted a large portion of the original sample as potential participants were without Internet access during survey distribution. Additionally, the author was misinformed on required permissions to seek participation from a major military academy, causing further delay in data collection. Finally, U.S. Cadet Command requested that the author cease data collection.
in the final phase of data collection, eliminating additional ROTC cadet participation after
several waves. Additional veteran respondents were added after the presented barriers, but at
lower response rates than anticipated. For instance, the first phase of data collection to a national
veteran organization was distributed on September 11\textsuperscript{th}: a critical holiday and day of
remembrance for most Afghanistan-era veterans.

**Apparatus**

Surveys were distributed and data collected through Qualtrics online survey software. The Qualtrics software was set to not collect any personal information (i.e., IP addresses) from those who complete the survey. Additionally, Qualtrics is one of the most secure survey platforms available, and is widely used for business collecting confidential customer data. Subjects completed the surveys on the personal device of their choosing once clicking on the emailed link.

**Materials**

Social support, unit cohesion, and well-being were assessed using measures previously validated in civilian samples and used during the pilot study. Military identity was assessed using a foreign scale with three factors with military components, and additional information was collected on demographic characteristics, military history, and social network associations.

**Military and civilian social network.** Association with the military, including family legacy and current social network ties, was assessed using a measure constructed specifically for this project in collaboration with several military leaders. This scale includes items such as “Have any of the following members of your family served in the Armed Forces? (Check all that apply, or skip if none) (Yes – mother, Yes – father, Yes – grandmother, Yes- grandfather, Yes – older brother, Yes – older sister, Yes – younger brother, Yes – younger sister, Yes – other
immediate family), and “How long have you wanted to be a service member in the U.S. Armed Forces?” While these questions do not directly fit into the proposed model, they were useful in determining differentiations between the measured groups.

**Military identity.** Military identity was assessed using a slightly altered version of Johansen et al.’s (2013) 34-item *Norwegian Professional Identity Scale* (NPIS): a three-factor measure of military identity including Idealism, Professionalism, and Individualism. The Idealism factor includes patriotic statements, such as “I look upon work in the Armed Forces as a calling where I can serve my country.” Professionalism is equivalent to warriorism, requesting responses to statements such as “The possibility of participating in war actions is an important motivating factor for me.” Individualism assesses one’s individualistic nature and the value they see in work in the Armed Forces, with statements such as, “I am motivated to serve in the Armed Forces due to the possibilities and challenges I am offered.” All statements request a Likert-scale response (1 = *totally disagree*, 7 = *totally agree*). See Appendix C for full measure, including alterations.

**Social support.** Participants’ perceived social support was measured using the full version of the *Multidimensional Scale of Perceived Social Support* (MSPSS), which has been validated in both military and civilian samples to assess global friend, family, and significant other social support systems (see Nyaronga & Toma, 2015; Romero, Riggs, & Ruggero, 2015; B. N. Smith et al., 2013; Whiteman, Barry, Mroczek, & MacDermid Wadsworth, 2013; Zimet et al., 1990). See Appendix C for full measure.

**Unit cohesion.** Hornsey et al.’s (2012) one-item scale of group cohesion was administered to address cohesion with one’s group, and globally with all similar persons. For example, in the ROTC cadre, participants were asked to assess their level of closeness with their
ROTC battalion, and asked separately to assess their closeness with all other ROTC cadets, nationally. This one-item visual scale can be assumed a manifest variable within the model, as it only has one item and directly addresses closeness with one’s group. See Appendix C for full measure.

**Well-being.** Hills and Argyle’s (2002) 29-item *Oxford Happiness Questionnaire* (OHQ) was administered to assess state well-being across all samples. The OHQ measures state happiness at the time of assessment, and includes items such as “I am very happy,” and “I am well satisfied about everything in my life.” Respondents choose a 1-6 Likert scale response (1 = *strongly disagree*, 6 = *strongly agree*). See Appendix C for full measure.
CHAPTER THREE: ANALYSIS

As noted above, there were significant difficulties in acquiring the number of participants for power in the originally-planned measurement validation and structural equation model, the entire sample was used for all analyses and no measurement invariance tests were performed. Structural factor analysis for the NPIS combined both the pilot study sample and the current sample.

Respondents from the survey were primarily male, white, and middle-aged ($M = 35.09, SD = 11.61$). Additionally, most respondents were married (43.3%) or single (35.5%), were from the Northwest (39.7%) or Southeast (21.3%) region of the U.S., and were current college students (71.6%) (see Appendix D, Table 3 for all demographic information).

As opposed to the pilot study, veteran and ROTC groups did not differ in their levels of cohesion, nor in their levels of overall well-being. Additionally, neither veterans nor ROTC cadets had higher levels of legacy (family members who served in the U.S. military). Therefore, the groups were treated as homogenous for additional analyses.

Earlier this year, I examined the factor structure of the NPIS using a combination of pilot study cases and the first half of the collected sample from the current study ($N = 135$) in preparation for presentation at the American Association for the Behavioral and Social Sciences convention. First, I performed a restricted 3-factor ESEM to determine whether the originally proposed factor structure with all 33 items was acceptable. It was not ($\chi^2 = 1104.152, df = 461, p = 0.000; \text{RMSEA} = 0.102; \text{CFI} = 0.404; \text{SRMR} = 0.116$). After dropping weak items, the model fit improved significantly ($\chi^2 = 85.098, df = 32, p = 0.000; \text{RMSEA} = 0.111; \text{CFI} = 0.829; \text{SRMR} = 0.085$), though still not acceptable. However, modification indices only revealed potential alterations to the measure that would not have a good theoretical background, so
analyses were not again performed until data collection was completed (see Appendix D, Figure 1.1).

Once the dissertation data were in, I again investigated the factor structure of the NPIS using findings from the first sample as a guide. In combining the pilot and dissertation project samples and eliminating missing data, a total of 167 cases contributed to the model. The factor structure that included three items for Idealism ($\alpha = 0.996$) and Individualism ($\alpha = 1.00$), and four items for Professionalism ($\alpha = 0.996$) showed acceptable fit ($\chi^2 = 62.375, df = 32, p = 0.0010; \text{RMSEA} = 0.075, 90\%\text{CI} = 0.047 \text{ to } 0.103, p = 0.068; \text{CFI} = 0.932, \text{TLI} = 0.904; \text{SRMR} = 0.075$). Modification indices indicated that by adding a correlated residual between two Individualism items, the fit would be further improved. When adding the correlated residual between IN10 (“Good payment is one of the most important presumptions to participate in international operations abroad.”) and IN3 (“An important premise for participation in international operations is to be rewarded with high salaries.”), the model fit significantly improved ($\chi^2 = 49.084, df = 31, p = 0.0207; \text{RMSEA} = 0.059, 90\%\text{CI} = 0.024 \text{ to } 0.089, p = 0.294; \text{CFI} = 0.959, \text{TLI} = 0.941; \text{SRMR} = 0.054$). The final model also showed excellent reliability for the complete 10-item scale ($\alpha = 0.998$). No other modification indices were theoretically viable (see Appendix D, Figure 1.2 for final factor structure).

Additionally, I performed a confirmatory factor analysis to determine the validity of the proposed factor structure for the MSPSS in the military-affiliated population. It appears the factor structure which divides social support into three distinct factor was not applicable to this military sample ($\chi^2 = 95.105, df = 51, p = 0.0002; \text{RMSEA} = 0.115, 90\%\text{CI} = 0.079 \text{ to } 0.151, p = 0.004; \text{CFI} = 0.764; \text{TLI} = 0.695; \text{SRMR} = 0.122$). A number of items showed very weak loadings. To attempt to determine a valid factor structure for this sample, I ran a parallel EFA to
determine whether a 1, 2, or 3-factor solution without restricting item assignment to factors would be better-suited. The 1-factor solution had a very poor fit ($\chi^2 = 104.849$, $df = 54$, $p = 0.000$; RMSEA = 0.120; CFI = 0.728, TLI = 0.667; SRMR = 0.106). A two-factor solution showed improved fit to the data ($\chi^2 = 57.110$, $df = 43$, $p = 0.0733$; RMSEA = 0.071, 90%CI = 0.000 to 0.116, $p = 0.240$; CFI = 0.924, TLI = 0.884; SRMR = 0.061). A three-factor solution demonstrated excellent fit to the data. However, factor loadings in the three-factor solution showed excessive cross-loading, and yielded only 1-2 items per factor. I ran a CFA restricting cross-loadings, which showed excellent model fit to the data ($\chi^2 = 12.938$, $df = 13$, $p = 0.4526$; RMSEA = 0.000, 90%CI = 0.000 to 0.122, $p = 0.602$; CFI = 1.000, TLI = 1.001; SRMR = 0.057). Therefore, analyses were continued with a two-factor solution for the MSPSS (see Appendix D, Figure 1.3).

The final part of the analysis was to determine the relationship between social factors and well-being. Again, using the pilot study as a guide, I initially created a model wherein military identity factors predict well-being through group and global cohesion, with family and friend social support factors as independent predictors of well-being. The model fit very poorly ($\chi^2 = 329.45$, $df = 145$, $p = 0.000$; RMSEA = 0.116, 90%CI = 0.099 to 0.132, $p = 0.000$; CFI = 0.775, TLI = 0.705; SRMR = 0.088) and required investigation into possible relationships between variables.

To determine if there were any valid relationships between variables, I sought correlations between all latent variables. Fortunately, some evidence for relationships between the Idealism factor of military identity and social support from friends, Idealism and group cohesion, and group cohesion and well-being appeared. Based on these correlations, the second model used the pilot study as a guide to determine position of these variables within a structural
equation model. The final model had acceptable fit ($\chi^2 = 35.849$, $df = 25$, $p = 0.0739$; RMSEA = 0.068, 90%CI = 0.000 to 0.114, $p = 0.263$; CFI = 0.957, TLI = 0.938; SRMR = 0.051), and is shown in Appendix D, Figure 1.4.
CHAPTER FOUR: CONCLUSIONS

The purpose of this study was two-fold: to determine the viability of using a foreign measure of military identity in a U.S. military-affiliated sample, and to determine relationships between other social factors on well-being for the same sample. After extensive trimming of the original measure of military identity, it does appear as though there are at least three divergent factors of military identity present in ROTC cadets and military veterans. These factors operate well on their own, though further study with a larger sample size and acceptable group sizes would be beneficial in learning how the measure works within different types of military samples (e.g., by branch, by career stage, or by rank). It is possible that the military identity scale’s components are not invariant between groups, but this sample was not large enough to investigate this possibility.

Additionally, the unexpected finding that the MSPSS does not operate in the expected manner with the military-affiliated population is surprising, especially considering the long-established nature of the measure. There are two main possibilities from this finding; (a) that social support does not operate in the same manner in military-affiliated individuals as it does in the general population, or (b) that this sample was especially unusual. Considering the relatively small sample size, the latter seems more likely, but additional research should further investigate how social support, a widely-acknowledged vital antecedent of well-being, operates in military-affiliated individuals.

In determining how social factors, such as identity, cohesion, and social support impact well-being, this study determined that not all factors of military identity, nor all factors of social support, have an impact on well-being for cadets, current service members, and veterans. Additionally, one’s perceived cohesion with the entirety of their occupational group (e.g., all
ROTC cadets or all veterans) has no effect on well-being, nor is it related to any other variable investigated in this study. So, it seems that in military-affiliated populations, cohesion is most impactful when specific to one’s directly-engaged military-affiliated groups. This finding is not surprising, but notable considering the intensity with which military service members discuss their bonds with other members of their teams. Additional research should seek more information about this relationship with one’s group, as cohesion has held as a strong predictor of well-being in this population above and beyond social support from non-military-affiliated social networks. It is also important to note that social support from family had no significant impact on well-being for these individuals, indicating that one’s closeness with other members of their military-affiliated groups is more impactful than one’s closeness with their significant others, closeness with their children, and closeness with other family members in their overall happiness. The effect of cohesion and closeness with military-affiliated groups over family support has been discussed anecdotally in the scientific literature, but this is the first known attempt to directly assess the importance of both non-military social support and military cohesion in the same study. Considering the findings here, future research and intervention studies may focus on the importance of military groups in positive outcomes for service members and veterans, while noting that family may have less of an impact for positive outcomes in this population than is found in the general public.

Finally, military identity has not been directly examined as a factor in well-being in a military population. While some scholars have argued that warrior-like tendencies may have a negative impact on service members and veterans, this study demonstrated that the warrior component of military identity has no relationship with any other social factors, nor on well-being directly. While Professionalism does have a connection to other components of military
identity, it does not appear to predict happiness, social support, or cohesion with one’s military-affiliated group. Further study should address whether warriorism and desire for combat training has an effect on other social factors and positive, or negative, outcomes. Patriotism, however, does appear to be important in contributing to cohesion with one’s military-affiliated group, as well as social support from friends. The unexpected effect between patriotism and social support from friends within the final model might be due to a connection between one’s support that they feel with their military-affiliated group and other individuals who have experienced similar circumstances. That said, social support from friends had no direct bearing on well-being in this sample, so there is an indication of divergence between social support as extracted by this study, and cohesion with one’s group. Therefore, further research should address whether non-military-affiliated friends and military-affiliated social networks have separable effects on one’s well-being as a current or former military service member.

Several limitations should be noted from this study. First, the samples from both the pilot data and the recent data are skewed towards a non-representative sample for a military population study. The resulting sample had a lower percentage of white men than are typically found in military and veteran samples, and was also skewed somewhat towards married, older individuals who had served in the military for nearly 10 years. This sample does not necessarily reflect the demographics or service periods of most enlisted members or veterans in the U.S.

Additionally, the sample size is much smaller than desired, due to unforeseen circumstances in data collection. Between natural disasters, misinformation in procedures for data collection, loss of contact with several facilities, and loss of access to ROTC cadets, the resulting sample did not meet the 400 suggested for power. Therefore, these data may be anomalous. Also, from the sample collected, a significant number of respondents did not
complete the entire survey. Future iterations of this study may benefit from the trimmed measures, as the NPIS has been reduced from a 34-item scale to a 10-item scale, and the MSPSS may also be trimmed after further investigation into its performance in military samples. Finally, a shorter well-being scale may be used in future studies to reduce the overall duration of one’s commitment when entering the study. The current study took participants between 30 minutes and 1 hour to complete, which is lengthy for a completely voluntary trial with no monetary compensation. It is likely that many respondents experienced survey fatigue, or were otherwise unmotivated to complete the entire measure. A replication study may mitigate these circumstances with supervised survey completion and funding to compensate participants for their time.

Due to the slightly unusual nature of the sample collected over the course of this project, as well as the small sample acquired over both the pilot and second phase, it seems clear that more research must be done to determine how social factors that contribute to well-being in the general population affect the military population in the same, or different, ways. Ultimately, the incorporation of social factors for interventions for the U.S.’s defense is a less expensive and more beneficial approach than treating for negative outcomes that can impact service members once they return from combat, training, and non-combat assignments. Cohesion and social support may operate differently for those who choose to volunteer years of their life to civil service, and individuals who have undergone experiences so disparate from the average civilian’s life require special investigation into the issues that surround their terms in service and their return to their families and friends without connection to their experiences and ideals. In the future, scholars, clinicians, and investigators should take special note that the military population is a unique one that requires additional care in determining best practice to aid in their well-being.
and happiness. In aligning with interdependence theory, and Lewin’s original proposition that one cannot separate the person from their environment, greater attention must be paid to the severity of the problems that U.S. military personnel face in the field, and once they return home to a system that may not accommodate their individual needs.
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https://doi.org/10.1207/s15327752jpa5503&4_17
APPENDIX
Appendix A

Table 1

ROTC Demographics

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*Table 1* Demographic characteristics of ROTC cadre.
Table 2

Veteran Demographics

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*Table 2.* Demographic characteristics of student-veteran sample.
Appendix B

Figure A. Exploratory Structural Equation Model for the NPIS.

Figure B. Nested model of social support, unit cohesion, military identity, and well-being showing effect of unit cohesion and social support on well-being moderated by military identity. Unit cohesion is a manifest variable using the 1-item cohesion measure, and social support, military identity, and well-being are latent variables assessed through multi-item questionnaires. This model is over-identified.
Figure C. Parent model of social support, unit cohesion, military identity, and well-being showing direct and indirect effects of social support and unit cohesion on well-being partially moderated by military identity. Unit cohesion is a manifest variable using the 1-item cohesion measure, and social support, military identity, and well-being are latent variables assessed through multi-item questionnaires. This model is just-identified.
Appendix C

Demographics Questionnaire

1. I identify my gender as:
   □ Male
   □ Female
   □ Trans*
   □ _______ (fill in the blank)
   □ Prefer not to disclose

2. I identify my race as:
   □ American Indian or Alaska Native
   □ Asian
   □ Black or African American
   □ Hispanic or Latino
   □ Native Hawaiian or Other Pacific Islander
   □ White

3. What is your age (in years)? {text box}

4. Are you a current college student?
   □ Yes
   □ No

5. Which best describes your current academic status? [screened from Question 4]
   □ Freshman
   □ Sophomore
   □ Junior
   □ Senior
   □ Master’s student
   □ PhD student

6. Are you a member of ROTC?
   □ Yes
   □ No

7. Are you a current member of the U.S. Armed Forces?
   □ Yes
   □ No

8. Are you an American Armed Forces veteran?
   □ Yes
   □ No

9. How long have you been enrolled in the ROTC program? [screened from Question 6]
   □ 1 semester
   □ 2 semesters
   □ 3 semesters
   □ 4 semesters
   □ 5 semesters or longer

10. {Question Logic – If previous 1-4 semesters} Do you attend ROTC physical training?
    □ Yes
    □ No

11. Are you a first-generation college student? [screened from Question 4]
    □ Yes
    □ No
    □ Prefer not to disclose
Military History and Network Questions

1. With what branch of ROTC do you train? [enlisted-screened question]
   - [ ] Army
   - [ ] Navy
   - [ ] Marines
   - [ ] Air Force

2. With what branch of the U.S. Armed Forces do you serve? [enlisted-screened question]
   - [ ] Army
   - [ ] Navy
   - [ ] Marines
   - [ ] Air Force
   - [ ] National Guard
   - [ ] Coast Guard

3. With what branch of the U.S. Armed Forces did you serve? [veteran-screened question]
   - [ ] Army
   - [ ] Navy
   - [ ] Marines
   - [ ] Air Force
   - [ ] National Guard
   - [ ] Coast Guard

4. What is your current rank? [enlisted-screened question]
   - [ ] __________________

5. What was the highest rank you achieved while in the military? [veteran-screened question]
   - [ ] __________________

6. What is your occupational title? [enlisted-screened question]
   - [ ] __________________

7. What was the last occupational title you held while in the military? [veteran-screened question]
   - [ ] __________________

8. What is your marital status?
   - [ ] Married
   - [ ] Single
   - [ ] Divorced
   - [ ] In a domestic partnership
   - [ ] Widowed
   - [ ] Prefer not to answer

9. Have any of the following members of your family served in the Armed Forces? (Check all that apply, or skip if none)
   - [ ] Yes – mother
   - [ ] Yes – father
   - [ ] Yes – grandmother
   - [ ] Yes – grandfather
   - [ ] Yes – older brother
   - [ ] Yes – older sister
   - [ ] Yes – younger brother
   - [ ] Yes – younger sister
   - [ ] Yes – Other immediate family

10. Were you involved in ROTC? [enlisted and veteran-screened question; only if “no” to demographics ROTC Q6]
    - [ ] Yes
    - [ ] No

11. Were you involved in JROTC? [ROTC-screened question]
    - [ ] Yes
    - [ ] No

12. How long have you wanted to be a service member in the U.S. Armed Forces? [ROTC-screened question]
13. How long did you serve in the military (in years)? [enlisted-screened question]

14. How long did you serve in the military (in years)? [veteran-screened question]

15. How long did you aspire to be a service member before you joined the military [enlisted and veteran-screened question]?

16. In what year did you leave military service? [veteran-screened question – careful screening (exclude current and ROTC)]

17. How many of the people you are close to are currently associated with the Armed Forces (e.g., currently are or were enlisted, retired, or in civilian service to any branch of the U.S. Armed Forces)?
   □ 0
   □ 1-3
   □ 4-6
   □ 7-9
   □ 10+

18. Do you plan on continuing in the military as a career service member? [ROTC and enlisted-screened question]
   □ Yes
   □ No
Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the “1” if you Very Strongly Disagree
Circle the “2” if you Strongly Disagree
Circle the “3” if you Mildly Disagree
Circle the “4” if you are Neutral
Circle the “5” if you Mildly Agree
Circle the “6” if you Strongly Agree
Circle the “7” if you Very Strongly Agree

1. There is a special person who is around when I am in need. 1 2 3 4 5 6 7 SO
2. There is a special person with whom I can share my joys and sorrows. 1 2 3 4 5 6 7 SO
3. My family really tries to help me. 1 2 3 4 5 6 7 Fam
4. I get the emotional help and support I need from my family. 1 2 3 4 5 6 7 Fam
5. I have a special person who is a real source of comfort to me. 1 2 3 4 5 6 7 SO
6. My friends really try to help me. 1 2 3 4 5 6 7 Fri
7. I can count on my friends when things go wrong. 1 2 3 4 5 6 7 Fri
8. I can talk about my problems with my family. 1 2 3 4 5 6 7 Fam
9. I have friends with whom I can share my joys and sorrows. 1 2 3 4 5 6 7 Fri
10. There is a special person in my life who cares about my feelings. 1 2 3 4 5 6 7 SO
11. My family is willing to help me make decisions. 1 2 3 4 5 6 7 Fam
12. I can talk about my problems with my friends. 1 2 3 4 5 6 7 Fri

The items tended to divide into factor groups relating to the source of the social support, namely family (Fam), friends (Fri) or significant other (SO).
NPIS (Johansen et al., 2013a)

For the following items, indicate the degree to which you agree on a scale of 1-7 (1=totally disagree, 7=totally agree). If you are a military veteran, answer the following recalling your feelings during your military service.

**Idealism**

1. The Armed Forces should primarily be used to defend [United States] territory.
2. My motivation to participate in international operations depends on whether or not these support [United States] interest at large.
3. It is wrong to participate in military operations that do not explicitly promote [United States] values and interests.
4. It is wrong to participate in war-like actions in a country which is not my own.
5. It is more important to defend one’s own territory than to defend [United States] interests in international operations.
6. I look upon work in the Armed Forces as a calling where I can serve my country.
7. A clear indication of being a good citizen is to serve in the Armed Forces to defend one’s country.
8. My motivating power to be in the Armed Forces is to serve something more important than my personal needs.
9. * The cause I am fighting for during operations is of secondary importance.
10. The uniform really brings forward my national pride.
11. *{Redacted question} Traditional ideals as Service, King, and Country are out of date and belong to the history.

**Professionalism (Warriorism)**

1. My motivation is to gain operational experience by using my military skills in highly intensive operations.
2. The possibility of participating in war actions is an important motivating factor to me.
3. Self-sacrifice, courage, and fellowship in war are more important than ever.
4. I prefer service in high-intensity rather than peacekeeping operations.
5. One of my top motivating factors is to completely develop and master my military skills.
6. When I joined the Armed Forces, I had a clear expectation of taking part in war operations.
7. Codes of honor and unit values are of the utmost importance in the Armed Forces.
8. The Government may deploy me to whichever mission as long as it does not contradict my moral convictions.
9. The most important part of the military role is to prepare for and conduct war-like operations.
10. I believe that controlled aggression will be an important element if I have to take part in war actions.
11. The idea of fellowship in arms as the primary motivating factor to participate in operations is subordinated.
12. The Armed Forces should be characterized by warrior culture.

**Individualism**

1. Self-fulfillment is a very important part of my engagement in the Armed Forces.
2. I am motivated to serve in the Armed Forces due to the possibilities and challenges I am offered.
3. An important premise for participation in international operations is to be rewarded with high salaries.
4. The Armed Forces must respect my civilian life e.g., family, residential, and leisure interests.
5. I see being in the Armed Forces as an ordinary job.
6. *In the Armed Forces, duty takes priority over rights.
7. I regard being in the Armed Forces as one of several possible job alternatives.

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8. For me it is natural to compare advantages and disadvantages to be in the Armed Forces versus having a civilian job.
9. I am willing to leave the Armed Forces if I am offered a civilian job with better salary and working conditions.
10. Good payment is one of the most important presumptions to participate in international operations abroad.

Note. * Indicates that items are reversed.
Unit Cohesion Questions and Scale

ROTC-screened

Below are six diagrams. Each diagram contains five circles that move increasingly closer to one another. The center circle represents yourself and the four surrounding circles represent your fellow ROTC members at your university. Please circle the number of the diagram (1–6) that best represents your perception of the ROTC cadre. Do not worry if the number of circles does not match the number of members in your ROTC cadre. [ROTC-screened]
Below are six diagrams. Each diagram contains five circles that move increasingly closer to one another. The center circle represents yourself and the four surrounding circles represent all your fellow ROTC members nationally. Please circle the number of the diagram (1–6) that best represents your perception of the ROTC group. Do not worry if the number of circles does not match the number of members in your ROTC group. [ROTC-screened]
Enlisted-screened

Below are six diagrams. Each diagram contains five circles that move increasingly closer to one another. The center circle represents yourself and the four surrounding circles represent your fellow military service members you currently work with (e.g., in your brigade, platoon, training group, etc.). Please circle the number of the diagram (1–6) that best represents your perception of your military service group. Do not worry if the number of circles does not match the number of members in your military group. [enlisted-screened]
Below are six diagrams. Each diagram contains five circles that move increasingly closer to one another. The center circle represents yourself and the four surrounding circles represent all of your fellow enlisted military service members in the U.S. Armed Forces. Please circle the number of the diagram (1–6) that best represents your perception of all military service members. Do not worry if the number of circles does not match the number of members in the U.S. military group. [enlisted-screened]
Below are six diagrams. Each diagram contains five circles that move increasingly closer to one another. The center circle represents yourself and the four surrounding circles represent all of your fellow military veterans. Please circle the number of the diagram (1–6) that best represents your perception of your entire veteran group. Do not worry if the number of circles does not match the number of members in your veteran group. [veteran-screened]
Are you a member of any of the following veteran’s organizations? [veteran-screened question]

- University-affiliated veteran organization
- Team Red White and Blue
- Iraq and Afghanistan Veterans of America
- VFW
- The American Legion
- Other (type in) ________
- None [if selected, skip to end of survey]

Below are six diagrams. Each diagram contains five circles that move increasingly closer to one another. The center circle represents yourself and the four surrounding circles represent your fellow veterans in your veteran organization. Please circle the number of the diagram (1–6) that best represents your perception of the veteran group. Do not worry if the number of circles does not match the number of members in your veteran group. [veteran-screened]
Oxford Happiness Questionnaire (Hills & Argyle, 2002)

INSTRUCTIONS. Below are a number of statements about happiness. Would you please indicate how much you agree or disagree with each by entering a number alongside it according to the following code:

1=strongly disagree; 2=moderately disagree; 3=slightly disagree; 4=slightly agree; 5=moderately agree; 6=strongly agree.

You will need to read the statements carefully because some are phrased positively and others negatively. Don’t take too long over individual questions; there are no ‘right’ or ‘wrong’ answers and no trick questions. The first answer that comes into your head is probably the right one for you. If you find some of the questions difficult, please give the answer that is true for you in general or for most of the time.

1. I don’t feel particularly pleased with the way I am ( )
2. I am intensely interested in other people
3. I feel that life is very rewarding
4. I have very warm feelings towards almost everyone
5. I rarely wake up feeling rested ( )
6. I am not particularly optimistic about the future ( )
7. I find most things amusing
8. I am always committed and involved
9. Life is good
10. I do not think that the world is a good place ( )
11. I laugh a lot
12. I am well satisfied about everything in my life
13. I don’t think I look attractive ( )
14. There is a gap between what I would like to do and what I have done ( )
15. I am very happy
16. I find beauty in some things
17. I always have a cheerful effect on others
18. I can fit in everything I want to
19. I feel that I am not especially in control of my life ( )
20. I feel able to take anything on
21. I feel fully mentally alert
22. I often experience joy and elation
23. I do not find it easy to make decisions ( )
24. I do not have a particular sense of meaning and purpose in my life ( )
25. I feel I have a great deal of energy
26. I usually have a good influence on events
27. I do not have fun with other people ( )
28. I don’t feel particularly healthy ( )
29. I do not have particularly happy memories of the past ( )

Appendix D

Table 3

Full study demographics

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*Table 3:* Demographics of second-phase sample. Note that for Branch reports, veterans and enlisted service members overlap.
Figure 1.1: NPIS factor model derived from combining pilot data with phase 2 data collection. Only significant paths are shown, and all coefficients are standardized. Item numbers correspond to original item numbers in survey.
Figure 1.2: Final factor-structure model for NPIS. Only significant paths are shown, and all coefficients are standardized. Item numbers correspond to item numbers in original survey.
Figure 1.3: Two-factor structure of the MSPSS from phase-2 data collection. Only significant paths are shown, and all coefficients are standardized. Item numbers correspond to item numbers in original survey.
Figure 1.4: Final SEM model depicting the connection between Idealism (patriotism factor from the NPIS), and social support from friends, as well as the interplay between Idealism (id), cohesion with one’s military-affiliated group (gc), and well-being (wbmean). Coefficients are standardized and only significant paths are shown.