Spring 2024

Wellness as a Predictor of Turnover Intention in the Active Duty Military

Thomas Clifford Seguin
Old Dominion University, seguintc@gmail.com

WELLNESS AS A PREDICTOR OF TURNOVER INTENTION IN THE ACTIVE DUTY MILITARY

by

Thomas Clifford Seguin
B.A. May 2009, Miami University
M.A. December 2017, University of Nebraska at Omaha

A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirements for the Degree of

DOCTOR OF PHILOSOPHY

EDUCATION - COUNSELING

OLD DOMINION UNIVERSITY
May 2024

Approved by:

Jeffry Moe (Director)

Lauren B. Robins (Member)

Brittany G. Suggs (Member)

Yonghee Suh (Member)

Abstract

WELLNESS AS A PREDICTOR OF TURNOVER INTENTION IN THE ACTIVE DUTY MILITARY

Thomas Clifford Seguin
Old Dominion University, 2024
Director: Dr. Jeffry Moe

Due to the unique nature of military service compared to civilian professions, military attrition is difficult to predict using methods derived from career development theories, so turnover remains an ongoing concern for the active duty military. For this reason, military attrition, through turnover intention, should be investigated through a novel lens with the intention of capturing an essence of military service which previous methods may have overlooked, namely the holistic construct of perceived wellness. Previous studies have shown how wellness-related factors affect turnover intention, but none has studied the relationship between perceived wellness and turnover intention. The main hypothesis of this study is that perceived wellness predicts turnover intention over and above other, less-holistic factors and demographic variables. Results of a hierarchical logistic regression indicated that perceived wellness subscale scores, but not composite scores, predicted turnover intention over and above Survey of Perceived Organizational Support scores, demographic factors, and turnover beliefs. Results of a Spearman correlation and factorial and one-way MANOVAs revealed that participants who were officers, women, and educated had significantly higher wellness scores, and that higher pay grades, higher number of dependents, longer tenure, and higher age were correlated with higher wellness, although these differences should be interpreted with caution. Results of this study have implications for military wellness and retention efforts, as well as for professional counselors and counselor educators who work with military populations

This dissertation is dedicated to my wife Caitlin, and our children, Margaret, Catherine, and unnamed baby three, whose imminent arrival has been my motivation to finish on time.

Acknowledgements

First, I give my heartfelt thanks to my dissertation chair and methodologist, Dr. Jeffry Moe, who has guided and mentored me in so many ways, so I could reach my goals on my timeline. He gave me the room to work things out on my own, but also made sure I was pointed in the right direction every step of the way. I am also very grateful for the support of my committee members, Dr. Suggs, Dr. Robins, and Dr. Suh, whose advice and guidance helped me stretch and grow as a researcher and justice-oriented educator.

I am also thankful for the support and guidance I have received over the last 3 years from the faculty and staff of ODU's Department of Counseling and Human Services, who have truly helped me grow from a professional counselor into a counselor educator, and showed by example what great counselor educators do. I am further grateful for the mentorship I received from counselor educators and supervisors beyond ODU, whom I aspire to grow up and be like someday, including Dr. Bjornsen-Ramig, Dr. Kissinger, Dr. Gerwe, and Kipp Lanning. Thanks also to my illustrious cohort, without whom I could not imagine making this journey: Nic Schmoyer, Betsy Perez, Cheslea Hilliard, Jessica Huffman, Onur Ozmen, Jasmine Griffith, and Vijay Paralkar. It has been an honor and a privilege to work with you all. Thanks also for help and support of my military friends, without whom I could not have recruited a large enough sample (and would not have finished this research project)!

I am grateful to my parents, Frank and Teddy Seguin, and my sister, Krista Gribble, who have supported me far longer than anyone else, and to my in-laws, who have been an integral part of this journey.

Finally, I am eternally grateful for the love and support of my wife and partner, Caitlin, and our daughters, Margaret, and Catherine. Thank you for your unwavering support, encouragement, and for your sacrifices that made this all possible.

Table of Contents

LIST OF TABLES

CHAPTER 1

INTRODUCTION

Statement of the Problem

This chapter provides an introduction to the present study and will review the background of the problem along with the need for this research. This chapter will also review the purpose of the study, the study significance, and the research questions and hypotheses. This chapter will conclude with a list of terms and their definitions specific to this dissertation.

Introduction

Military retention is an ongoing concern for military leaders and planners, who have sought troops with the right training and experience to meet constantly changing needs (Coumbe, 2010). For enlisted military personnel, retention refers to reenlistment, which is, "a joint decision made by a member of the service and by [their] superiors: a commitment that the individual will continue on active duty for a substantial period of time" (Chow & Polich, 1980, p. 1). For commissioned officers, who incur active-duty service obligations at various career milestones, the choice to be retained in the military is an opt-out process that involves resigning one's commission (Hogue & Miller, 2020).

The retention decision process is not the only feature of military life that makes service members a unique population. Starting with onboarding training, the military intentionally indoctrinates new recruits to develop a military identity that includes a *warrior ethos,* emphasizing the personal sacrifices in the name of public service that separates the service members from civilians. Part of this personal sacrifice includes developing a deference to the hierarchical power structure of military rank and responsibilities, and obeying certain legal restrictions that do not apply to civilians. For example, military members have legal restrictions on where and when they must work, where they may live, what they may say and do (in and out of uniform), how and when they are able to leave military service, and on obeying orders of officers appointed over them generally. Service members are taught that these

restrictions are a necessary parts of military life that can have life-or-death consequences in certain situations that are a normal part of the profession of arms.

Beyond identity development, these unique aspects of military life have consequences that further separate them from their civilian counterparts. For example, service members are required to use military medical facilities, which are required to report certain information to the service members' unit commanders. Additionally, for many, the warrior ethos equates strength and resilience with denying vulnerability, which can look like service members refusing to seek treatment for injuries, illnesses and mental health, for fear of letting down their unit. These and other factors lead the military community to share several features with oppressed populations in the United States, including limited opportunities, lack of accessible resources like healthcare, limited autonomy and agency, marginalization, and underrepresentation in research. Developing professional warriors out of civilians is a costly and involved process not just for the military, but for the individuals undergoing the indoctrination as well, who end up leaving parts of themselves behind to develop the warrior ethos.

Since the draft ended in 1972, the U.S. military has maintained an all-volunteer force, which introduced new budgetary constraints for retaining experienced personnel and marked a shift towards a "company man system of personnel management" (Coumbe, 2010 p. 13), relying on career theory to inform retention policy in an attempt to improve the military's ability to persuade service members to stay in when they were no longer compelled to serve. Since then, despite ever-changing warfighting capability needs resultant from the development of various foreign conflicts, including a 20+ year continuous conflict in the Middle East, the need to maintain a highly capable military force ready to deploy globally at a moment's notice has remained (Coumbe, 2010; Hogue & Miller, 2020).

To help the military address its personnel needs, researchers have studied turnover among service members for decades (e.g., Motowidlo et al., 1976). Specifically, identifying the factors that motivate service members to want to stay in the military has been of particular interest in the post-

Vietnam era (Chow & Polich, 1980; Motowidlo & Lawton, 1984). While earlier research focused more on unchanging *trait-like* factors that influence retention (e.g., IQ, education, personality, marital status), more recent research has focused more on changeable *state-like* factors (e.g., job satisfaction, organizational climate, morale, stress, perceived organizational support) that may be not only better predictors of military turnover, but also may explain some of the observed trait-like factor differences like gender (Huffman & Olson, 2016; Lancaster et al., 2013). For example, in multiple studies, *perceived organizational support* (POS) was among the strongest predictors of turnover across genders and among officers and enlisted personnel (Huffman & Olson, 2016; Lancaster et al., 2013; Langkamer & Ervin, 2008).

Beyond turnover, individual state-like factors have received increased research attention in other aspects of military life as well. For example, resilience training programs have been implemented across services with the goal of improving service members' ability to bounce back from stress and trauma, thereby improving mental health outcomes and reducing downtime recovering from injuries (Cornum et al., 2011; Meadows et al., 2015). These programs addressed the need to always maintain a state of readiness for deployment, leading to the concept of *total fitness,* which utilizes a holistic approach to fitness that includes not only the physical domain, but social, nutritional, spiritual, behavioral, medical, environmental, and psychological domains as well (Meadows et al., 2015; Mullen, 2010). This holistic approach is necessary not just for understanding fitness, but for mental health treatment as well (Carrola & Corbin-Burdick, 2015).

Wellness is a holistic paradigm that has been used in research and practice to understand individuals' unique factors that contribute to their overall level of wellbeing (Myers & Sweeney, 2005). Beyond the absence of illness, wellbeing encompasses health-promoting behaviors and characteristics as well to better understand the extent to which an individual is functioning optimally (Ryff, 2014). One comprehensive measure of wellbeing, *psychological wellbeing* (PWB), has been associated with positive

outcomes in military populations including reduced symptoms of depression and PTSD (Bergman et al., 2019) and reduced suicidal ideation (Trachik et al., 2021). Although PWB remains one of the most popular wellbeing measures used with the military, its theorized factor structure does not appear to be valid for a military population, based on confirmatory and exploratory factor analyses (Trachik et al., 2023). This is consistent with findings from other studies on the PWB model (Trachik et al., 2023) and on wellness-related measures, which inconsistently support the theorized factor structures associated with wellness models (Roscoe, 2009). This phenomenon may be indicative of an indivisibly holistic and interconnected nature of wellness with dimensions that are highly influential to one another (Myers & Sweeney, 2005). It may also highlight some of the unique military cultural and organizational factors that affect the perception of wellness among service members, including the onboarding indoctrination and training process, agency and autonomy factors related to rank hierarchy and following orders, frequent relocations, and a population that strongly identifies with career progression, among others (Trachik et al., 2023).

However, holistic indicators of wellness have not been studied as possible predictors of turnover intention, though the two variables appear to be correlated (Stetz et al., 2007). Phenomenological research has shown that service members perceive that wellness-related factors had a significant influence on their own retention decisions (Seguin et al., 2018). Other wellness-related factors have also been shown to affect turnover intention, like supervisor support, organizational support, work-life balance, work stimulation, job clarity (Dupré & Day, 2007; Sachau et al., 2012), and psychological distress (Jiang et al., 2015). However, while wellness is generally conceptualized as more stable than typical state-like constructs, unique military contextual factors, like the way military service encompasses the totality of service members' lives, may make it more affected by work-related conditions, with a holistic measure being more reliable than a factor-specific approach (Trachik et al., 2023). With recent increased focus on wellness in the military (e.g., Grinston et al., 2019) and recent

congressional calls for further attention on service member wellbeing (Suicide Prevention and Response Independent Review Committee [SPRIRC], 2022), understanding how wellness affects turnover intention in the military is necessary and timely.

Purpose of the Study

The purpose of this study is to investigate the relationship between service members' perceived wellness and their intentions to separate from the military, when controlling for POS and demographic factors. More broadly, the aim of this research is to identify whether a holistic measure of wellness (i.e., Perceived Wellness Survey [PWS] scores) is a better predictor of turnover intention than specific service member traits and trait-like factors or less-holistic state-like factors (i.e., POS).

Significance of the Study

This study will provide insight into how holistic conceptualizations of wellness can be useful in understanding not only how individual service members are flourishing in the context of their military service, but also how aspects of the military context affect the totality of service members' wellbeing. This information can inform military leaders about the holistic needs of their troops that will not only help them retain the right number and quality troops, but also help them better understand how non-occupational conditions might substantially affect the decision-making of service members in their charge. It may also inform counselors and other mental health providers serving military populations about the necessity of holistic thinking when working on job-related concerns. Data collected for the study may also be used to better understand the structure of the dimensions of wellness and how they affect overall wellness in the military.

Limitations of Past Research

Previous research on military turnover has so far failed to capture a critical part of the essence of military service, specifically, that due to the all-encompassing nature of military service, different aspects of life are all inextricably linked and have mutual influences on one another, perhaps more so

than most civilian occupations. This would explain why PWB, while fairly comprehensive in scope and associated with a number of other important concepts, does not appear to have valid subfactors that appear as theorized in the military population (Trachik et al., 2023). This would also partly explain why the military continues to have difficulty with retention despite decades of research seeking to understand the factors that influence the retention decision (Hogue & Miller, 2020).

Another key limitation is that past research has generally focused on individual characteristics and behaviors, rather than structural, contextual, and cultural factors that affect flourishing in the military (Cornum et al., 2011; Gonzalez et al., 2014; Trachik et al., 2023). This limitation is also multifaceted, likely reflecting a preference among military decision-makers for interventions that fit within the medical model approach to mental health (Carrola & Corbin-Burdick, 2015) and the popularity of positive psychology among military mental health and welfare institutions (Cornum et al., 2011; Gonzalez et al., 2014), which emphasize the individual's ability to function over the organization's responsibility to support diverse members, compared to approaches based on wellness counseling (Carrola & Corbin-Burdick, 2015; Prosek et al., 2018).

Research Questions and Hypotheses

To address specific gaps in prior studies and improve the understanding of the relationship between perceived wellness and turnover intention in the military, the following research question will be answered as two sub-questions and associated hypotheses:

Research Question. How does PWS predict TI when accounting for demographic variables, military contextual factors, and POS?

Sub-Question A. How do participants differ in PWS based on demographic traits and military context variables?

Hypothesis A. PWS scores will significantly differ ($p \leq .05$) based on demographic traits and military context variables.

Sub-Question B. Do Scores on the PWS predict TI odds over and above the influence of demographic variables, military context variables, and POS?

Hypothesis B. PWS scores will predict ($p \leq .05$) TI over and above the influence of demographic variables, military context variables, and POS.

Study Specific Definitions of Terms

Dependent. A dependent or military dependent is a person who is eligible to receive certain benefits and privileges based on their relationship to a military service member, veteran, or retiree, and typically include spouses, children, or sometimes others who live with and are supported by the military service member.

Ethnocultural Identity. This term describes the racial, ethnic, or other cultural group(s) with which an individual feels a sense of belonging and identifies. For the purposes of this study, categories were based on the U.S. Census (2022) procedures: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, White, or Some Other Race.

Gender. Gender or gender identity refers to the socially constructed roles, behaviors, and expressions that society considers appropriate for men, women, and people of other gender identities. Related to, but distinct from assigned sex at birth, for the purposes of this study, gender identity options were Female/female-identified, Male/male-identified, Transgender, or None of these.

Marital Status. Marital status refers to whether a person is now or has ever been legally married. In this study, the options will be never married, currently married, divorced or separated, or widow/widower.

Perceived Organizational Support. Developed from social exchange theory, POS is defined as "the perception of employees about the degree to which their contributions at organizations are valued, which implies that their associated well-being is given full consideration" (Maan et al., 2020, p. 1). In this

study, the Survey of Perceived Organizational Support, short version (Eisenberger et al., 1986) will be used to measure POS in the sample.

Perceived Wellness. This is the extent to which an individual perceives that they are functioning optimally in their environment. In this study, perceived wellness will be measured by the perceived wellness survey (Adams et al., 1997).

Rank. Rank refers to a service member's official title or designation within the hierarchical command system used by the military. Rank structure in the military is used to designate official authority and responsibility and corresponds to equivalent pay grades, which are uniform across the service branches in the U.S. military. Participants will be asked to select their pay grade (i.e., E1-E9, W1-CW5, or O1-O10) to indicate their current military rank designation.

Tenure. For this study, participants will be asked how many years of active service they have completed so far to indicate their length of tenure.

Turnover Intention. Turnover intention is the belief an individual has about whether they would remain in the military if given the choice. For this study, turnover intention will be measured by a single dichotomous item indicating whether, if given the choice today, they would choose to extend their active service commitment and remain in the military, which has been shown to strongly correlate with actual turnover behavior (Motowidlo & Lawton, 1984).

CHAPTER 2

LITERATURE REVIEW

Retention and Turnover in the Active Duty Military

The decision about whether to remain in the military beyond the expiration of a service member's current obligation is known as retention (GAO, 1999). Since the end of 1972, the United States has maintained an all-volunteer military, which means that in order for a service member to be retained in the military, not only must they be deemed fit to continue their service, but also they must choose to stay in (Chow & Polich, 1980). Military retention is a significant concern because higher-ranking service members (who work as skilled technicians, trainers, supervisors, and managers) are selected only from among those with lower ranks with virtually no possibility of lateral entry for senior military leaders; the military is unable to recruit senior leaders from other industries (Asch, 2019). Therefore, any time the military fails to retain enough troops to fill leadership positions, more troops must be recruited and trained to meet the needs of the nation (Hogue & Miller, 2020).

For these reasons, understanding retention behavior has been a military priority for decades, with early research identifying how changes to compensation and demographic factors affect the retention decision, but failing to find significant effects related to factors of military service including separation from family, frequent moves, and long working hours (Chow & Polich, 1980). However, separate research, informed by career development theory, showed how job satisfaction and morale affect military turnover in addition to the motivation provided by compensation and benefits (Motowidlo et al., 1976), and further research also showed that job satisfaction influences turnover intention through a service member's expectations about the outcomes of being retained versus separating (Motowidlo & Lawton, 1984).

Further developments in research on military turnover led to the introduction of the concepts of organizational commitment (Farkas & Tetrick, 1989), work/family conflict (Teplitzky, 1991), burnout

(Harrington et al., 2001), organizational support (Dupré & Day, 2007), psychological climate (Lankamer & Ervin, 2008), psychological distress (Jiang et al., 2015), and job control (Huffman & Olson, 2016) as influential to a service member's intention to leave or stay in the military. For married service members, spousal support and marital conflict have been shown to be significant predictors for job satisfaction, turnover intentions, and turnover behaviors (Rosen & Durand, 1995; Sachau, 2012). Each of these factors has been conceptualized as a component of employee wellbeing, a holistic understanding of how well a person is functioning in their work environment (Page & Vella-Brodrick, 2008). Wellbeing has also been linked with turnover intention, as both were shown to be influenced by military stress, however holistic wellbeing has not been studied per se as a possible causal influence on turnover in a military population (Stetz et al., 2007).

However, military retention appears to be a perennial problem with new stressors and conflicts meeting changing generational values and trends, outpacing the Pentagon's ability to make needed updates, and resulting in repeated calls for changes to a variety of military systems and programs with the aim of improving physical and mental health among service members, reducing burnout, and improving retention (Archer & Alagaraja, 2021).

Turnover Intention

Turnover intention (TI) is defined as a service member's inclination whether they believe they will remain in active military service beyond the expiration of their current service commitment. In the United States military, service members must declare their intention to remain in the military during specified timeframes in their careers which are correlated with the length of time remaining in their current service commitments (Chow & Polich, 1980). For the enlisted corps, this time period is referred to as the *reenlistment window* and generally lasts for the final 12 months of the service commitment contract, although that is not always the case for every branch of service. For commissioned officers, an active duty service obligation contract must be signed in order to accept orders to relocate to a new

duty station, which generally occurs after two years at the current duty station. Because of this determined time period in which service members must make explicit retention decisions, the link between TI and actual behavior would be expected to be higher in the military than in other employment sectors (Huffman et al., 2005).

In fact, Chow & Polich (1980) found that service members could accurately estimate how likely they were to reenlist up to 12 months prior to the opening of their reenlistment window (in 10% increments, from .00-.1 up to .9-1.00 likelihood), however, like other methods (e.g., DoD Survey of Officer and Enlisted Personnel; McCalla et al., 1986) this procedure simultaneously introduces variance in responses for an ultimately dichotomous concept (i.e., either service members will choose to remain or they will choose to leave) while also restricting variance in other ways (e.g., service members may choose to extend their current contracts versus incurring another more significant service commitment to delay the retention decision). Other methods to measure TI focus more on career intentions, with possible responses ranging from, “definitely stay in until retirement or longer,” to, “probably leave upon completion of my current obligation,” which, although related to the intention to stay beyond the current obligation, it also includes information about future retention decisions as well (Huffman & Olson, 2016). These procedures may not precisely measure TI (Hale, 1990) or may require statistical base rate correction for more accurate analyses (Steel et al., 1990). However, a single-item dichotomous variable has repeatedly been shown to strongly correlate with actual turnover behavior (Chow & Polich, 1980; Rakoff et al., 1994).

Understanding the factors that influence TI can help military leaders better understand and influence the retention of service members with the right characteristics to meet military needs (Asch et al., 2005). To date, the military has used various models to affect retention rates by offering selective reenlistment bonuses and other pay incentives to military members in certain high-demand career fields (Goldberg, 2001). Notably, the annualized-cost-of-living (ACOL) model (Enns, 1975), the dynamic

retention model (Gotz & McCall, 1984), and panel probit models have been used by the DoD, however these models have failed to account for the quality of service members enticed by pay-based incentives and the litany of research showing the importance of quality-of-life factors in the retention decision (Asch et al., 2005). For these reasons and others, it is currently impossible for the military to predict whether an individual will choose to leave, even when the unemployment rate, geopolitical climate, service member demographic factors, test scores, and service contract characteristics are known and accounted for (Marrone, 2020).

However, TI has been shown to be influenced by a variety of other indicators that hold predictive value. For example, effective human resources practices in the active duty military (in this case, anti-sexual harassment practices) were shown to improve retention of service members by improving organizational commitment and reducing service member psychological distress (Jiang et al., 2015). In another study, psychological climate (i.e., the self-perception of how beneficial an organizational environment is for the service member's wellbeing) was shown to have direct and indirect effects (through the mediating relationships of organizational commitment and morale) on retention of Army officers, particularly when they felt supported by competent commanders (Langkamer & Ervin, 2008). Additionally, perceived conflict between the military lifestyle and family was also shown to affect retention among married military members (Teplitzky, 1991). This indicates that beyond demographic variables, job characteristics and pay, TI is influenced by the ways in which work and life stressors are conceptualized by service members and whether they feel supported by the organization in the military lifestyle context (Anderson et al., 2022; Stetz et al., 2007).

Perceived organizational support (POS), related to organizational commitment through social exchange theory, is generally conceptualized as an individual's perception of the degree to which an organization is committed to them (Eisenberger et al., 1986; Hutchinson, 1997). Among service members, POS has been shown to have a mitigating effect on the negative relationship between stress

and wellbeing (Dickstein et al., 2010; Kelley et al., 2014), and stress has been shown to be a detriment to the development of POS in the military (Barnes et al., 2013; McDonald et al., 2020). POS has also been shown to have an effect on job satisfaction and TI (Dupré & Day, 2007; Maan et al., 2020), and a mediating role in the relationship between those and work-family conflict (Sachau et al., 2012; Zarei, 2019). POS has been defined as how employees perceive that their "organization values [their] contributions and cares about their well-being" (Eisenberger et al., 1986, p. 501), which seems to explain its relationship with TI in the military as an indicator of more holistic optimal functioning than other (more reductivist) individual variables and factors.

Wellness

One trend in counseling and psychological research since the 1980s has been a shift in paradigm that conceptualizes mental health as the level at which an individual is thriving in their environment, as opposed to earlier medical models which focused more on the absence of mental illness as the defining feature of mental health (Ryff, 2014). This holistic strengths-based paradigm is called *wellness* and has been increasingly studied across healthcare disciplines through various models and equivalent constructs for the last several decades (Myers & Sweeney, 2005). One of the first wellness models to be developed (Hettler, 1984) has six dimensions (physical, social, emotional, intellectual, occupational, and spiritual) and is reportedly holistic, but in practice has emphasized physical health over the importance of the other dimensions, likely reflecting the orientation of the medical field, from which this model emerged (Myers & Sweeney, 2008).

Later, a model rooted in the field of psychology called *psychological well-being* emerged, and Ryff (1989) constructed an instrument that measures wellbeing across six dimensions: *autonomy, environmental mastery, personal growth, positive relations with others, purpose in life,* and *self-acceptance* to address perceived shortcomings in earlier models (Ryff, 2014). Despite the differences in wording used among different models, wellness and wellbeing describe essentially the same concept in

mental health research. For example, the World Health Organization (2021) defines well-being as "a positive state experienced by individuals and societies. Similar to health, it is a resource for daily life and is determined by social, economic, and environmental conditions" (p. 10). Like wellness, wellbeing "encompasses quality of life, as well as… a sense of meaning and purpose… A society's well-being can be observed by the extent to which they are resilient, build capacity for action, and are prepared to transcend challenges," (WHO, 2021, p. 10). Any distinct differences between wellbeing and wellness will generally depend on the discipline and experience of whoever is describing them.

Another model that emerged from the field of psychology (via positive psychology) is called the *PERMA* model, referring to the dimensions of *positive emotion, engagement, relationships, meaning,* and *accomplishment* as the basis for interventions intended to promote wellbeing (Seligman, 2010). In positive psychology, wellbeing refers to the extent to which an individual is experiencing both positive feelings and positive functioning (Page & Vella-Brodrick, 2008). These models have been particularly popular in research on military populations, but their theoretical underpinnings do not appear to accurately represent the hypothesized constructs as service members experience them (Trachik et al., 2023).

From the field of counseling, several other models of wellness have been developed and studied as well, including *perceived wellness* (Adams et al., 1997) and the *Indivisible Self* model of wellness (Myers & Sweeney, 2005). These models are theorized to use six dimensions or five factors to conceptualize wellness, respectively, and both emphasize social and contextual factors more than earlier wellness models (Harari et al., 2005; Myers & Sweeney, 2008). Both models also have assessment instruments with reported psychometrics that support the theoretical constructs (the PWS and the Five-Factor Wellness Inventory; Harari et al., 2005; Myers & Sweeney, 2008), however to date, neither assessment has been validated with an active duty military population.

The six dimensions of wellness measured by the PWS are similar to those theorized by Hettler (1984), and are labeled *social, physical, spiritual, psychological, emotional,* and *intellectual* (Adams et al., 1997). Notably, the eight domains of Total Force Fitness also include *social, physical, spiritual,* and *psychological* (in addition to *medical, nutritional, environmental, and behavioral*) dimensions, indicating that the military has identified the need to address service member fitness holistically and has adopted a model based on similar constructs as the PWS (Meadows et al., 2015). Other initiatives have also called for an increased focus on holistic wellness, including the Army People Strategy (Grinston et al., 2019) and the Suicide Prevention and Response Independent Review Committee's report to congress about recommendations for suicide prevention in the military (SPRIRC, 2022). However, Total Force Fitness is centered around service members' individual resilience and readiness to deploy rather than their ability to function optimally within the military system (Mullen, 2010). Therefore, although research on wellness is lacking for the active duty military, it is a promising paradigm through which the military lifestyle may be holistically assessed and understood (Seguin et al., 2018).

Critical Summary

The military is a stressful occupation by its very nature (Wilcox, 2000). As an organization, the purpose of the military is to fight wars on behalf of the nation, so from basic training onward, service members are intentionally put in stressful situations to train them to handle the stress of warfighting (Wilcox, 2000). This stress takes a toll on the psychological health and wellness of service members (Archer & Alagaraja, 2021), and has led the DoD to create hundreds of programs across the military to address service member psychological health (Weinick et al., 2011). However, there are many features of life on active duty that compound this stress unintentionally and unnecessarily, creating conditions that make psychological and behavioral problems worse, including mental illness and suicide, and leading to increased turnover and retention difficulties (SPRIRC, 2022).

With the increased attention on service member wellbeing, the DoD may be uniquely poised to make lasting structural changes that modernize the force and improve its ability to adapt to future needs (SPRIRC, 2022). In response to the critical shortage of behavioral health providers (and worsening supply-demand imbalance for behavioral healthcare), the SPRIRC recommended adding professional counselors as both active duty and civilian providers for military behavioral healthcare, easing the requirements for counselors to get paneled with TRICARE, and increasing pay for behavioral health providers (SPRIRC, 2022). With a focus on wellness and systems (Kaplan et al., 2014) and an ethical mandate to advocate for clients (ACA, 2014), professional counselors may be uniquely well-suited to guide the DoD in the implementation of these needed changes to improve service members' lives and the military's ability to respond to changing needs across the globe (Prosek et al., 2018).

The military is a group that represents the diversity of U.S. society in general in socioeconomic status, gender, affectional orientation, geographic locations, racial and ethnic backgrounds, and others (Yamada et al., 2013). Because of this and the unique characteristics of military service, models of wellbeing that have been previously studied with active duty populations have failed to accurately capture the holistic nature of the military experience and support the theorized constructs of psychological wellbeing (Trachik et al., 2023). Wellness has been identified as a model that could meet this need, and to better inform providers, policy makers, and others about how well service members are functioning in their environments (Carrola & Corbin-Burdick, 2015). Although the adoption of positive psychology and its related constructs into the military system has been beneficial in some ways (Cornum et al., 2011) and been useful in highlighting further areas of concern (Brown et al., 2022), its limitations may be hindering the ability to fully understand the struggles that service members as they experience them (Brown, 2015; Gonzalez et al., 2014).

Military service is a unique profession in that the occupational aspects are inextricably linked to every other aspect that makes up a service member's holistic wellbeing. For this reason, turnover in the

military is influenced by factors beyond job satisfaction, organizational support, occupational stress, or organizational commitment. Understanding military turnover is a complicated issue that requires holistic thinking. Using a wellness perspective to understand turnover will also inform service member functioning. The military has been moving towards more holistic thinking about service member functioning (Mullen, 2010; Trachik et al., 2023), and the recent increased emphasis on improving service member wellbeing indicates that this trend will continue to expand well into the future (SPRIRC, 2022).

The current study aims to add to the existing knowledge base regarding TI and wellness in the military by using a measure of holistic wellness to predict TI, and by comparing that predictive value to other known predictors of TI, including POS, age, gender, ethnocultural origin, service component, branch of service, pay grade, tenure, marital status, number of dependents living at home, and level of education. This study will also add to the existing literature by investigating the factor structure of perceived wellness in the active duty military to better understand how wellness models may be useful when working with this population.

CHAPTER 3

METHOD

The primary goal of this study was to explore the relationships between perceived wellness (PW) and turnover intention (TI), while controlling for perceived organizational support (POS) and select demographic variables. This chapter will address the specific methodology conducted to address the research questions related to these relationships. The methodology is organized into several parts to include the research paradigm and design, selection of participants, sampling procedures, instrumentation, data collection, data analysis, and limitations.

Research Paradigm and Design

The philosophical paradigm for this study is postpositivism, which emphasizes validity, reliability, and alternative hypotheses to verify or disprove theory and describe constructs that are likely to describe some universal reality (Hays & Singh, 2012). For this study, PW, POS, and TI are all constructs that are likely to objectively exist, however they are only ever experienced through the perceptions of participants and thus cannot be measured directly. This research pursued objectivity, however a postpositivist approach acknowledges that the subjectivity of the researcher and participants are inextricable from the constructs being measured (Robson & McCartan, 2016).

An ex post facto survey design was used for this study, which tests for associations among variables in a population by studying a sample of that population (Creswell & Creswell, 2020). The hypothesized discovery of covariation among these variables, which can identify possible predictive influences, is also among the uses of survey research thanks to consistency of questions and possible answers resulting in standardized responses that allow for quick and economical data analysis (Sapsford, 2007). The survey was cross-sectional and implemented using Qualtrics, an online survey distributor. This procedure was selected to reach a large sample quickly and affordably.

The survey asked participants if they are an active duty member of the United States Armed Forces; a 'yes' response is required for inclusion in this study. Participants were then be asked to specify their age in years, time in service in years, branch of service, pay grade, level of education, and whether they live with any dependents (including a spouse). They were also asked to specify their gender, choosing from among Man/male-identified, Woman/female-identified, Transgender, or None of These, and their ethnocultural identity, choosing from among American Indian/Alaska Native, Asian, Black or African American, Hispanic/Latino, Native Hawaiian or other Pacific Islander, White, or Some Other Identity. A single-item measure for turnover intention was included, asking participants to indicate yes or no to the question, "Do you intend to stay in the military after the end of your current service obligation?"

The purpose of this survey was to answer the following research question, which has been expanded into two sub-questions and associated hypotheses:

Research Question. How does PWS predict TI when accounting for demographic variables, military contextual factors, and POS?

Sub-Question A. How do participants differ in PWS based on demographic traits and military context variables?

Hypothesis A. PWS scores will significantly differ ($p \leq .05$) based on demographic traits and military context variables.

Sub-Question B. Do Scores on the PWS predict TI odds over and above the influence of demographic variables, military context variables, and POS?

Hypothesis B. PWS scores will predict ($p \leq .05$) TI over and above the influence of demographic variables, military context variables, and POS.

Participants

The target population for this study was active duty service members in the United States military. The population included officer and enlisted service members across all branches of service, but excluded those currently serving in the National Guard or Reserves, since the nature of their service commitments is substantially different from the active component. According to the A Priori Sample Size Calculator for Hierarchical Multiple Regression (Soper, 2023), a minimum of 105 participants would be required to detect a statistically significant effect ($\alpha = .05$) with 32 total predictor variable groups (among eight variables), a desired statistical power of 0.8, and a moderate effect size of 0.15 (Cohen, 1988). An alpha equal to .05 is justified because it balances the risks of Type I and Type II errors occurring. Using this significance level would also make it easier to compare the results with other studies that follow the same convention, which is common in military TI research.

Sampling

Purposive convenience sampling was utilized to achieve the desired effect size with the cooperation of gatekeepers who have access to active duty military email distribution lists and military social media groups. Because this research required participation from members of each of the service branches, gatekeepers in various locations around the United States were recruited to help distribute the survey. These gatekeepers were contacted by phone, email, or direct message, and included friends, friends of friends, and former colleagues of the researcher who were still on active duty and could distribute the survey via military email, or who had access to social media groups with active duty military members, and military message board moderators on social media.

Instrumentation

Participants were sent a link to the survey via email that included the informed consent document (see Appendix A), the demographic survey (Appendix B), the Perceived Wellness Survey (PWS;

Adams et al., 1997), the Survey of Perceived Organizational Support (SPOS; Eisenberger, 1986), and an item asking about turnover intention (TI; Rakoff et al., 1994).

Demographic Survey

The demographic survey for this study will include items which have been previously linked to TI in military populations. It will ask for each participant's age, number of years served so far (tenure), marital status, and number of dependents living at home (Vasterling et al., 2015), ethnocultural origin, gender (Marrone, 2020), component (active, reserve, national guard), pay grade (Gotz & McCall, 1984), branch (GAO, 1999), and level of education (Laurence, 2014). It will also include items that capture certain aspects of the military sociocultural context that may be influential to PW but have not been shown to influence TI beyond the other demographic variables (e.g., number of deployments). Some of these items are also intended to capture participants' beliefs about turnover. Specifically, they were asked whether they believe they are eligible to remain in the military, they are likely to be recommended for promotion, and they have served a greater good through their military service.

Perceived Wellness Scale

The PWS (Adams et al., 1997) is a 36-item measure using a 6-point Likert-type scale ranging from 1 (very strongly disagree) to 6 (very strongly agree) that measures the extent to which an individual perceives that they are experiencing wellbeing on six subscales based on the wellness dimensions of the PWM: psychological, emotional, social, physical, spiritual, and intellectual (Adams et al., 1997). Each subscale consists of 6 items, however the model's authors conceptualized perceived wellness as a single holistic construct in which each subscale is interrelated with the others and therefore do not represent true separate subscales as suggested by the dimensions of the PWM (Adams et al., 1997). Composite scores are derived from a mathematical algorithm that is intended to integrate magnitude and balance into an overarching perceived wellness construct, however the subscales are also intended to be useful

for independently assessing wellness in each dimension, despite being correlated with one another (Adams et al., 1997).

In examining the psychometric properties of the PWS during its development, the instrument authors found a strong scale internal consistency in four separate samples (coefficient α = .88 to .93). In another study, Harari et al. (2005) found that the instrument had strong criterion validity, accounting for 29.3% of the variance in the Beck Depression Inventory-Second Edition (Beck et al., 1996), 11.4% of the variance in the Beck Anxiety Inventory (Beck et al., 1993), and 18.2% of the variance on the Hopkins Symptom Checklist-21 (Green et al., 1988), which was consistent with the hypothesized model. They also found that the instrument did not significantly distinguish between the proposed dimensions of the PWM and suggested that perceived wellness may indeed be unidimensional as opposed to the multidimensional structure theorized by the vast majority of wellness models (Harari et al., 2005). Another suggestion was that the instrument may fail to discriminate between subscale dimensions because of its emphasis on brevity, however the evidence for multidimensionality in wellness is scarce even among other lengthier assessments based on a variety of wellness models (Harari et al., 2005).

Survey of Perceived Organizational Support

The short version of the SPOS is a 16-item measure using a 7-point Likert-type scale that measures the extent to which an individual believes their organization supports them and was adapted from the original 36-item long version (Eisenberger et al, 1986). It was developed to better understand the nature of organizational commitment from a social exchange perspective which theorize that employee commitment to the organization is influenced by their perception that the organization is also committed to the employee (Eisenberger et al., 1986). In the development of the instrument, Eisenberger et al. (1986), reported the scale scores as highly reliable (coefficient α = .97). In a subsequent study, Eisenberger et al. reported a coefficient α ranging from .74 to .95 (1990). In another study, Hutchinson (1997) found that the SPOS was highly correlated yet empirically distinct from

affective commitment and organizational dependability measures, which is evidence of construct validity in the instrument.

Turnover Intention

TI was measured using a single dichotomous item indicating whether respondents currently intend to remain in the military after the completion of their current service commitment. This has been shown to be a strong predictor of actual turnover behavior (Chow & Polich, 1980; Rakoff et al., 1994), and conceptually will most strongly relate to current PW compared to other methods of measuring TI. This was the dependent variable.

Data Collection Procedure

This project was presented to the Old Dominion University Human Subjects Review Board for approval before data collection began. License agreements were not needed for the PWS and SPOS since they were being used for research purposes. An informed consent document (Appendix A), demographic survey with the TI item (Appendix B), and the two assessments, was distributed to participants using a Qualtrics electronic survey. Participants were first presented with the informed consent document and were not able to proceed until consent was provided. Participation was voluntary and withdrawal was permitted at any point during the survey. Data was stored in the web-hosted Old Dominion University Qualtrics software system. All participant data was anonymized and password-protected, accessible only to the researcher, and risks were actively minimized through confidentiality and anonymization. Recruitment materials were distributed via email and social media through gatekeeper collaborators who had access to active duty military distribution lists and social media groups. Gatekeepers were asked to distribute email survey links or approve message board posts only one time each.

Data Analysis

Data Cleaning

Once the dataset is collected, it was uploaded into IBM SPSS statistics (Version 29) predictive analytics software, and any partially missing or otherwise invalid responses were removed. Variables were checked to ensure proper labeling and any personally identifiable information was also removed. The cleaned SPSS data file was stored on an encrypted, password-protected personal computer owned by the primary investigator. Anonymized study data was stored in accordance with university policy and best practices until it can be destroyed.

Assumption Checks

After the dataset was cleaned, a demographic and descriptive results correlation matrix was created to check for assumptions of normality, independence of errors, absence of multicollinearity, and exchangeability (Wong & Mason, 1985). It was also checked for linearity of the relationship between the independent variables and the log odds of the dependent variables (logit), homoscedasticity, and a binary outcome. Variables that violate these assumptions may be dropped or transformed as necessary, however logistic regression analysis is generally robust, and small violations of assumptions may not significantly impact results. However, checking these assumptions helped to improve the validity and reliability of the analysis. Additionally, a post hoc exploratory factor analysis was conducted on the PWS to inform the validity of the analysis by comparing the factor loadings with the theoretical wellness model that undergirds the instrument, providing evidence for how well the model fits the data and therefore the usefulness of the model with the population. To my knowledge, this was the first time a factor analysis was conducted on the PWS with data from an active duty military population.

Analysis

A Pearson's correlation was to be conducted to identify the nature of the relationship among the continuous variables and PWS scores, and a factorial MANOVA was conducted to determine

whether there are any between-groups differences in PWS scores based on demographic variables. Then, a hierarchical logistic regression analysis was used to determine whether TI can be predicted based on the independent variables, and if PWS scores add predictive value to POS and the demographic variables. However, violations of some of the assumptions of these analytic procedures required that they be modified to improve the validity of the analysis (see Chapter 4).

Positionality Statement

The author of this study is a middle aged, middle class, heterosexual White male from the United States. He is an enlisted veteran of the United States Air Force who served on active duty for six years and reserve duty for one year. He is also a licensed professional counselor. His interest in the topic of this study is based on his own experiences in separating from active duty and then working as a mental health counselor in the Midwest, showing him how service members are an underserved and marginalized population in the United States, and how enlisted troops in particular experience oppression, even within the military organization. These identities made it easier to access some military populations for research, particularly other White, male, enlisted troops and participants in the Air Force, and more difficult to recruit participants from other demographic backgrounds. Without official support from the military, however, participants were limited to the demographic groups that generally participate in the military message board groups, were members of military social media groups in which the author was also a member, or were contacted by the author's personal contact gatekeepers personally or via social media.

Study Limitations

One limitation of this study is that it does not have an experimental design, which limits the validity and reliability of the predictive conclusions drawn from the analyses. Additionally, without random sampling and without a control group, this study may have detected confounds that were not already identified or addressed, further limiting the strength of the conclusions. Thirdly, the PWS has not

already been validated with this population, so it is unknown whether the perceived wellness construct itself is valid in this context. Further limitations are inherent in survey research designs and include the possibility that respondents may stop faithfully answering questions part way through, which is a particular threat for long surveys, or that they may select responses that reflect a social desirability bias.

CHAPTER 4

RESULTS

This chapter describes the results of data analyzed from participants who completed the survey for this study, which included measures for perceived wellness and organizational support, demographic questions, and items about the military context, turnover beliefs, and turnover intention. The research questions and hypotheses, data cleaning procedures, participant demographics, correlations between variables, assumption and validity checks, and descriptions of the main statistical analyses are included. Perceived wellness was measured using the Perceived Wellness Survey (PWS; Adams et al., 1997) and perceived organizational support was measured using the Survey of Perceived Organizational Support (SPOS; Eisenberger et al., 1986). One additional short questionnaire was utilized to assess participant demographic variables and their intention to turnover after the end of their current service obligation.

Research Questions and Hypotheses

The research question was broken down into two sub-questions and hypotheses. Sub-question A was answered using a factorial MANOVA and a correlation matrix, and sub-question B was answered using a hierarchical logistic regression analysis.

Research Question. How does PWS predict TI when accounting for demographic variables, military contextual factors, and POS?

Sub-Question A. How do participants differ in PWS based on demographic traits and military context variables?

Hypothesis A. PWS scores will significantly differ ($p \leq .05$) based on demographic traits and military context variables.

Sub-Question B. Do scores on the PWS predict TI odds over and above the influence of demographic variables, military context variables, and POS?

Hypothesis B. PWS scores will predict ($p \leq .05$) TI over and above the influence of demographic variables, military context variables, and POS.

Description of Data and Sample

Data were collected over the course of six weeks using Qualtrics survey software. An anonymous link for the survey link was distributed via email and social media to military-affiliated personal contacts of the researcher and posted to military-affiliated groups, communities, and message boards, which generated 420 total responses. These responses were generated after the survey link was sent to 24 personal contacts to share via social media, shared with 5 social media groups with a combined membership of 10.5k, emailed to seven active duty personal contacts to share, and posted on five social media message boards (which generated a combined total of approximately 17 thousand views), so the specific return rate was not determinable from the collection methods used.

Data Cleaning

Data were loaded into IBM SPSS (Version 29) for analysis. After incomplete responses, non-active duty responses (e.g., responses indicating a participant was on active orders in the National Guard or Reserves), and responses with missing values were removed from the sample, a total of 244 completed responses remained. The gender variable was dummy coded. Then, the PWS and SPOS reverse-scored items were adjusted, the PWS subscales and composite were scored according to the procedures described by Adams et al. (1997), and the total SPOS score was calculated (Eisenberger et al., 1986). Finally, the pay grade variable was also dummy coded to indicate whether a participant was enlisted or officer (warrant officers were included as officers).

Description of Participant Demographic Characteristics

Ten total demographic variables were collected: branch, pay grade, tenure, number of deployments, marital status, number of dependents, age, gender, race/ethnicity, and level of education. Participants (N = 244) represented all branches of the military, with 46.7% of respondents representing

the Army (*n* = 114), 27.0% Air Force (*n* = 66), 15.2% Navy (*n* = 37), 7.0% Coast Guard (*n* = 17), 2.5% Marine Corps (*n* = 6), and 1.6% Space Force (*n* = 4). 68.0% of participants were male (*n* = 166), and 32.0% were female (*n* = 78). Participants ranged in age from 18 to 50 years (*Mdn* = 32.5), had served from less than one year on active duty to 28 years (*M* = 10.97, *SD* = 6.13), ranged in pay grade from E3 to E9 (*n* = 121, *Mdn* = E5), W1 to W4 (*n* = 3, *Mdn* = W3), and O1 to O6 (*n* = 120, *Mdn* = O3). 74.2% of participants were White non-Hispanic (*n* = 181), 9.4% were Hispanic/Latine (*n* = 23), and 16.4% were non-White or multi-racial, non-Hispanic (*n* = 40). The latter group was comprised of the 2.9% of respondents who indicated an American Indian or Alaska Native identity (*n* = 7), 7.4% Asian (*n* = 18), 5.3% Black or African American (*n* = 13), 1.6% Native Hawaiian or Pacific Islander (*n* = 4), 2.5% some other identity (*n* = 6), and any who claimed multiple identities that included at least one of these groups, but not Hispanic or Latine. 65.6% of participants were married (*n* = 145), and 34.4% lived with no dependents (*n* = 84). Participants reported deploying for combat operations as few as zero times (*n* = 115, 47.1%) to more than ten times (*n* = 6, 2.5%, *Mdn* = 1). 31.6% of participants reported their highest completed level of education was a master's degree (*n* = 77), 28.7% reported a bachelor/4-year degree (*n* = 70), and 18.4% reported completing some college, no degree (*n* = 45). 51.6% of participants intended to stay in the military after the end of their current service obligation (*n* = 126). For comparison, a 2019 study of 122 thousand active duty military members showed that 55% of participants indicated they were likely to stay on active duty (OPA, 2019). A comparison of participant demographics and the active duty military overall (DoD, 2022) is depicted in Table 1.

Table 1

Demographic Makeup of Participants and Active Duty Overall

	Study Participants	Total Active Duty (2022)
Rank		
Enlisted	49.6%	81.8%
Officer	50.4%	18.2%
Branch		
Air Force	27.0%	24.6%
Army	46.7%	35.4%
Coast Guard	7.0%	*
Marine Corps	2.5%	13.4%
Navy	15.2%	26.1%
Space Force	1.6%	0.6%
Gender		
Men	68.0%	82.5%
Women	32.0%	17.5%
Ethnocultural Identity		
American Indian or Alaska Native	2.9%	1.1%
Asian	7.4%	5.2%
Black or African American	5.3%	17.3%
Hispanic/Latine	9.4%	18.4%
Native Hawaiian or Pacific Islander	1.6%	1.2%
White non-Hispanic	74.2%	68.8%
Some other identity	2.5%	3.3%
Married	65.6%	49.9%
Level of Education		
Less than high school	0.0%	0.1%
High school/GED or some college	24.9%	65.8%
Associate's degree	7.4%	8.5%
Bachelor's degree	28.7%	15.1%
Advanced degree	39.0%	8.4%

Note. Total Active Duty demographics are from September 2022. The Coast Guard is not included in the report because falls under the Department of Homeland Security, not the Department of Defense.

Perceived Wellness

The PWS was used to measure the extent to which participants believed they were flourishing (Adams et al., 1997). The measure includes a composite score as well as six wellness subscales: Psychological, Emotional, Social, Physical, Spiritual, and Intellectual. Each subscale comprised 6 items,

totaling 36 items in the instrument, with higher scores indicating higher levels of perceived wellness (Adams et al., 1997). Descriptives for the PWS subscales and composite scores used for analyses are presented in Table 2.

Perceived Organizational Support

The SPOS was used to measure each participant's belief that their military organization supports them. The SPOS is a 16-item measure using a 7-point Likert-type scale that was adapted from the original 36-item long version (Eisenberger et al, 1986). Descriptives for the SPOS are included in Table 2.

Table 2

SPOS and PWS Descriptive Statistics

	M	*SD*	Minimum	Maximum
PWS Subscales				
Psychological	3.889	.899	1.17	6.00
Emotional	4.014	.916	1.60	6.00
Social	4.452	.776	2.25	6.00
Physical	3.759	.898	1.50	6.00
Spiritual	3.992	.952	1.00	6.00
Intellectual	4.178	.679	1.67	5.83
PWS Composite	26.108	4.010	13.82	35.62
SPOS	55.275	23.635	16.00	112.0

Note. SPOS = Survey of Perceived Organizational Support. PWS = Perceived Wellness Survey. PWS items 3 (social), 27 (social), and 32 (emotional) have been removed for the analysis.

Turnover Intention

TI was measured using a single dichotomous item; however three additional questions were included in the demographic survey to assess participants' beliefs attitudes about their military service and turnover: 1. Do you believe you will be eligible to continue to serve in the military after the end of your current service obligation (Yes/No)? 2. Do believe you will most likely be recommended for promotion the next time you are eligible (Yes/No)? And 3. In general, do you believe that a greater good has been served by your military service (Yes/No)?

Overall, 51.6% of participants indicated they intended to stay in the military after the end of their current service obligation (*n* = 126), including 43.0% of enlisted participants (*n* = 52) and 60.2% of

officer participants (*n* = 74). 88.5% of participants indicated they will likely be eligible to remain in the military after their current service obligation (*n* = 216), including 86.8% of enlisted participants (*n* = 105) and 90.2% of officer participants (*n* = 111). 85.7% of participants indicated they will likely be recommended for promotion the next time they are eligible (*n* = 209), including 85.1% of enlisted participants (*n* = 103) and 86.2% of officer participants (*n* = 106). Finally, 68.9% of participants indicated they believe that a greater good has been served by their military service (*n* = 168), including 67.8% of enlisted participants (*n* = 82) and 69.9% of officer participants (*n* = 86).

Research Question

The research question was answered in two parts. By splitting the question into two sub-questions, the nature of the relationships between POS, perceived wellness (PW), and TI in the military could be more thoroughly examined. However, since PW had yet to be validated with a military population, an exploratory factor analysis was conducted to validate the constructs underpinning the research questions.

Exploratory Factor Analysis

A principal axis factor analysis was conducted on the 36 items of the PWS with oblique rotation (direct oblimin) and Kaiser normalization. The Kaiser-Meyer-Olkin measure verified the data were likely suitable for factor analysis, KMO = .911 (‘marvelous’ according to Kaiser & Rice, 1974), however only five individual items had KMO values above the acceptable limit of 0.5 (Kaiser & Rice, 1974). A principal factors parallel analysis revealed five factors with eigenvalues greater than those at the 95th percentile of 20 random data sets with no underlying factor structure, which differed from the theoretical model of 6 subfactors. Notably, using a Kaiser’s criterion eigenvalue cutoff to 1.0 (Kaiser, 1970) yielded 8 factors, a more liberal value of 0.7 (Jolliffe, 1986) yielded 12 factors, and a principal components parallel analysis yielded 3 factors. However, these methods are considered to be less-accurate for the sample size, number of items, and factor analysis method used in this study (Field, 2024). This is fairly consistent with

the PWS authors' original research which showed various factor analysis solutions ranging from one to seven factors (Adams et al., 1997).

When a single factor was extracted representing an overarching construct of PW, the model accounted for 31.9% of the common variance, and individual factor loadings varied from .263 to .792. Like in the original study, two items did not load with $|r| \geq .30$, however they were two different items than previously identified (Adams et al., 1997). Factor loadings are presented in Table 3.

Table 3

Factor Loadings for the Perceived Wellness Survey (n = 244)

Items	Factor 1
	Perceived Wellness
Psychological 1	.587
Psychological 2	.702
Psychological 3	.716
Psychological 4	.418
Psychological 5	.718
Psychological 6	.699
Emotional 1	.488
Emotional 2	.618
Emotional 3	.757
Emotional 4	.745
Emotional 5	.540
Emotional 6	.380
Social 1	.389
Social 2	.445**
Social 3	.443
Social 4	.478
Social 5	.407
Social 6	.551
Physical 1	.345
Physical 2	.312
Physical 3	.513
Physical 4	.379
Physical 5	.472
Physical 6	.525
Spiritual 1	.661
Spiritual 2	.792
Spiritual 3	.688
Spiritual 4	.677
Spiritual 5	.729
Spiritual 6	.756
Intellectual 1	.436
Intellectual 2	.516**
Intellectual 3	.513
Intellectual 4	.297*
Intellectual 5	.263*
Intellectual 6	.661

Note. * Indicated loadings were < .30. ** Items did not meet minimum loadings in Adams et al., 1997.

When 6 factors were extracted in accordance with the PWM, 4 items were cross-loaded onto multiple factors and an additional three items did not load onto any factor (with $|r| \geq .30$): items 3 and 27 on the social subscale, and item 32 on the emotional subscale. After removing the non-loading items, most of the remaining items did not load as predicted by the theoretical subscale factorings (Adams et al., 1997). Only the physical subscale contained all six items with $|r| \geq .30$, no cross-loadings among the items, and no highly loaded items from other subscales. The complete pattern matrix is in Table 4. PWS subscale and composite scores were then recalculated after the three non-loading items were removed for the rest of the analysis.

Table 4

Principal Axis Factor Analysis Pattern Matrix

	Factor					
Item	1	2	3	4	5	6
Psychological 2	.652					
Spiritual 1	.606					
Psychological 1	.579					
Spiritual 6	.567					
Spiritual 4	.552					
Spiritual 2	.527					
Psychological 6	.527					
Psychological 5	.519					
Psychological 3	.494					
Psychological 4	.431					
Emotional 5	.374					.367
Spiritual 5	.357					
Physical 3		.771				
Physical 1		.766				
Physical 5		.705				
Physical 4		.679				
Physical 2		.565				
Physical 6		.479				
Intellectual 1			.771			
Intellectual 5			.636			
Intellectual 2			.489			
Intellectual 3				.701		
Intellectual 4				.667		
Intellectual 6				.361		
Social 6				.344		
Social 2					.775	
Social 3					.646	
Emotional 1						.655
Emotional 4						.587
Emotional 2			.382			.505
Emotional 3	.391					.423
Spiritual 3	.311					.377
Social 3						.321

Note. Items Social 1, Social 5, and Emotional 6 have been removed due to insufficient factor loadings.

Sub-Question A

A correlation matrix was created to determine whether PWS composite and subscale scores differed based on the continuous demographic variables (pay grade, tenure, number of deployments,

number of dependents, and age), and to check assumptions for the planned logistic regression for sub-question B. Then, a factorial MANOVA was conducted to determine whether the categorical demographic variables (branch, enlisted/officer, marital status, gender, ethnicity, level of education) had an effect on PWS composite and subscale scores via either main effects or interaction effects.

Correlation Matrix

The data met the assumptions for a Pearson's correlation analysis by being continuous independent (age, tenure, number of deployments, number of dependents, and pay grade) and dependent variables (the six subscales of the PWS), each set of independent and dependent variables is paired, and each pair of variables appeared to be linearly related based on scatterplot examination. There were some outliers present for each variable pairing, however it is unlikely that they resulted from either data entry or measurement error, so they were left in for the analysis. However, based on the Shapiro-Wilk test for normality, none of the independent variables was normally distributed ($p < .001$, except for age, $p = .040$), and the social, spiritual, and intellectual subscales also were not normally distributed ($p = .005$, .009, and .010, respectively). Therefore, it was determined that a Spearman correlation would be a more appropriate test for the dataset.

The correlation matrix showed that there were weak positive correlations between pay grade and each subscale, between tenure and the psychological and spiritual subscales, between number of dependents and the psychological, emotional, and spiritual subscales, and between age and the psychological, emotional, spiritual, and intellectual subscales. There were also weak negative correlations between tenure and age on the physical subscale (see Table 5).

Table 5

Correlations: Perceived Wellness Subscales and Demographic Variables

		Psychological	Emotional	Social	Physical	Spiritual	Intellectual
Pay Grade	Spearman's ρ	.278	.186	.220	.207	.302	.198
	p	.000	.003	.001	.001	.000	.002
	N	244	244	244	244	244	244
Tenure (years)	Spearman's ρ	.131	.146	.091	-.170	.140	.114
	p	.041	.022	.155	.008	.029	.075
	N	244	244	244	244	244	244
Number of Deployments	Spearman's ρ	.002	.027	-.059	-.103	.030	.007
	p	.977	.680	.356	.108	.644	.918
	N	244	244	244	244	244	244
Number of Dependents	Spearman's ρ	.193	.200	.051	.089	.217	.138
	p	.002	.002	.432	.168	.001	.032
	N	244	244	244	244	244	244
Age	Spearman's ρ	.136	.179	.122	-.160	.153	.175
	p	.033	.005	.057	.012	.017	.006
	N	244	244	244	244	244	244

MANOVA

The data met the assumptions for conducting a factorial MANOVA by having continuous dependent variables (PWS composite and subscale scores), several categorical independent variables with two or more groups for each variable (branch, enlisted/officer, marital status, gender, ethnicity, and level of education), and independent observations. However, the large number of groups necessitated reorganizing them so there would be enough participants in each group to detect differences between them. Therefore, level of education was removed from the analysis because it was conceptually redundant with the enlisted/officer variable. Also, the low number of participants in the Coast Guard, Marine Corps, and Space Force necessitated that they be regrouped; Space Force participants were grouped with the Air Force and Marine Corps and Coast Guard participants were incorporated into the Navy Group. Similarly, the ethnocultural identity variable was regrouped, due to the low number of American Indian or Alaska Native, Asian, Black, Native Hawaiian or Pacific Islander,

and some other race respondents, into the following categories: non-White or multi-racial non-Hispanic, Hispanic/Latine any race, and White non-Hispanic.

The data also met the assumption of having a linear relationship between dependent variables, as assessed by scatterplot. There was some evidence of multicollinearity as assessed by Pearson correlation ($|r| < 0.9$), and only among groups with fewer than 12 participants, however 33 of the 59 groups had fewer than 4 participants, so for most groups correlations could not be determined. Marital status and ethnicity were then removed from the correlation analysis and again, evidence of multicollinearity was present in a few interactions ($|r| < 0.9$), but only in groups with fewer than 8 participants.

The data also had 26 total univariate outliers as assessed by inspection of a boxplot for values greater than 1.5 box-lengths from the edge of the box. However, because these outliers were not likely resulting from data entry or measurement errors, they were left in the analysis. There were no multivariate outliers in the data, as assessed by Mahalanobis distance ($p > .001$). PWS subscale scores were normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$), with three exceptions: the social subscale for female enlisted participants in the Navy, Marine Corps, or Coast Guard (USN/USMC/USCG; $n = 7$, $p = .020$), the spiritual subscale for female enlisted Army participants ($n = 9$, $p = .046$), and the psychological subscale for female officer USN/USMC/USCG participants ($n = 4$, $p = .014$). Several of the interaction cells had fewer than 6 cases, indicating that those interactions had inadequate sample sizes for the analysis. However, the assumption of homogeneity of covariance matrices was not violated, as assessed by Box's M test ($p = .062$).

The results of the MANOVA indicated that there was a significant main effect of enlisted/officer status on the combined dependent variables, $F(6, 216) = 3.009$, $p = .008$, Wilks' $\Lambda = .923$, partial $\eta^2 = .077$. There were no other significant main effects. There was no statistically significant interaction effect between branch, marital status, gender, and enlisted/officer status $F(6, 216) = .779$, $p = .587$,

Wilks' Λ = .979, partial η^2 = .021. However, there was a statistically significant interaction effect between branch, marital status, and enlisted/officer status $F(12, 432) = 2.225$, $p = .010$, Wilks' Λ = .887, partial η^2 = .058. There were no other significant interaction effects.

There were significant univariate main effects for enlisted/officer status on the psychological subscale, $F(1, 221) = 4.826$, $p = .029$, partial η^2 = .013, the emotional subscale, $F(1, 221) = 5.196$, $p = .024$, partial η^2 = .023, the social subscale, $F(1, 221) = 13.049$, $p < .001$, partial η^2 = .056, the spiritual subscale, $F(1, 221) = 12.026$, $p < .001$, partial η^2 = .052, and the intellectual subscale, $F(1, 221) = 4.404$, $p = .037$, partial η^2 = .020. There was also a significant univariate main effect for marital status on the intellectual subscale, $F(1, 221) = 5.038$, $p = .026$, partial η^2 = .022. There were no other significant univariate main effects. Post hoc tests were not conducted for enlisted/officer or marital status because there were only two groups for each variable.

To address the violated assumptions of the analysis, a series of post hoc MANOVAs was conducted. The first used a factorial design with only enlisted/officer and branch as factors for the six wellness subscales as dependent variables. Each interaction had an adequate sample size, and Box's M test showed there was homogeneity of covariance matrices ($p = .002$). The main effect of enlisted/officer status on the combined dependent variables was not significant, $F(6, 233) = 2.002$, $p = .066$, Wilks' Λ = .951, partial η^2 = .049. The main effect of the service branch on the combined dependent variables was also not significant, $F(12, 466) = 1.664$, $p = .072$, Wilks' Λ = .920, partial η^2 = .041. The interaction effect between enlisted/officer status and branch on the combined wellness subscales was also not statistically significant, $F(12, 466) = 0.863$, $p = .585$, Wilks' Λ = .957, partial η^2 = .022.

Then, a series of one-way MANOVAs was conducted to test for the effect of each of the other independent variables individually, to achieve adequate sample sizes: ethnocultural identity, gender, level of education, and marital status. The effect of ethnocultural identity on the combined subscale

scores was not significant, $F(12, 472) = 1.073$, $p = .381$, Wilks' $\Lambda = .948$, partial $\eta^2 = .027$. The effect of marital status on the combined dependent variables was also not significant, $F(6, 237) = 1.073$, $p = .380$, Wilks' $\Lambda = .974$, partial $\eta^2 = .026$.

For the gender variable, Box's M test showed that there was homogeneity of covariance matrices ($p = .582$). The effect of gender on the combined subscale scores was significant, $F(6, 237) = 3.370$, $p = .003$, Wilks' $\Lambda = .921$, partial $\eta^2 = .079$. Using a Bonferroni correction for 6 dependent variables to adjust the significance cutoff to $p < .008$, the univariate main effect was significant for the psychological subscale, $F(1, 242) = 12.757$, $p < .001$.

For the level of education variable, responses were reorganized into four groups: Less than a 4-year degree, bachelor's/4-year degree, master's degree, and professional/doctoral degree. Box's M test showed that there was homogeneity of covariance matrices ($p = .048$). The effect of level of education on the combined subscale scores was significant, $F(18, 665.166) = 2.368$, $p = .001$, Wilks' $\Lambda = .839$, partial $\eta^2 = .057$. Using a Bonferroni correction for 6 dependent variables to adjust the significance cutoff to $p < .008$, univariate main effects were significant for each subscale: The psychological subscale, $F(3, 240) = 11.104$, $p < .001$, partial $\eta^2 = .122$, the emotional subscale, $F(3, 240) = 4.134$, $p = .007$, partial $\eta^2 = .049$, social subscale, $F(3, 240) = 6.154$, $p < .001$, partial $\eta^2 = .071$, the physical subscale, $F(3, 240) = 4.320$, $p = .005$, partial $\eta^2 = .051$, the spiritual subscale $F(3, 240) = 9.233$, $p < .001$, partial $\eta^2 = .103$, and the intellectual subscale, $F(3, 240) = 5.858$, $p < .001$, partial $\eta^2 = .068$. Results of the post hoc Tukey test indicated that participants with a bachelor's, master's, or doctoral/professional degree each had higher PWS scores than participants with less than a 4-year degree ($p < .001$ for each comparison), but participants with a bachelor's, master's or doctoral/professional degree did not significantly differ from each other.

Sub-Question B

A hierarchical logistic regression was run to determine if the addition of SPOS and then PWS scores improved prediction of TI over and above demographic factors alone. Regressions using the PWS composite and subscale scores were conducted separately. Finally, an additional regression was conducted to assess whether the addition of the turnover beliefs variables affected the predictive value added by the SPOS and PWS scores.

Hierarchical Logistic Regression

The data met the assumptions for a logistic hierarchical regression by having a dichotomous dependent variable (TI), and multiple independent variables on continuous or nominal scales: branch, tenure, deployments, marital status, dependents, age, gender, ethnocultural identity, level of education, perceived organizational support, and the six perceived wellness subscales. The data also met the independence of observations assumption, and nominal variables were mutually exclusive and exhaustive.

Linearity of the continuous variables with respect to the logit of the dependent variable was assessed via the Box-Tidwell (1962) procedure. A Bonferroni correction was applied using all 30 terms in the model resulting in statistical significance being accepted when $p < .00167$ (Tabachnick & Fidell, 2014). Based on this assessment, all continuous independent variables were found to be linearly related to the logit of the dependent variable. There were six standardized residuals with a value ≥ 2.500 standard deviations, which were kept in the analysis.

The full model of demographic variables, POS, and composite PW to predict TI was statistically significant, $X^2(15) = 61.160$, $p < .001$. The addition of POS to the prediction of TI led to a statistically significant increase in X^2 of 40.312, $p < .001$. The addition of composite PW to the prediction of TI led to a non-significant increase in X^2 of 1.022, $p = .312$. The model explained 29.6% (Nagelkerke R^2) of the variance in turnover intention and correctly classified 70.1% of cases. Sensitivity was 72.2%, specificity

was 67.8%, positive predictive value was 70.5%, and negative predictive value was 69.6%. Of the 13 predictor variables, only one was statistically significant: POS (as shown in Table 6).

Table 6

Variables in the Full Logistic Regression Model with Composite PW

						Odds	95% CI for Odds Ratio	
	B	SE	Wald	df	*p*	Ratio	Lower	Upper
Branch: USAF/SF			2.814	2	.245			
Branch: Army	.198	.469	.179	1	.672	1.219	.487	3.055
Branch USN/MC/CG	-.445	.518	.737	1	.390	.641	.232	1.769
Pay Grade	-.194	.161	1.445	1	.229	.824	.600	1.130
Enlisted/Officer	2.347	1.653	2.014	1	.156	10.452	.409	267.075
Tenure (years)	-.003	.058	.002	1	.965	.997	.889	1.118
Number of Deployments	-.089	.085	1.097	1	.295	.914	.774	1.081
Marital Status	.098	.423	.054	1	.817	1.103	.481	2.527
Number of Dependents	.085	.156	.297	1	.586	1.089	.802	1.477
Age	.013	.053	.063	1	.802	1.014	.913	1.125
Gender	.692	.430	2.598	1	.107	1.998	.861	4.638
Ethn: White non-Hispanic			1.353	2	.508			
Ethn: Hispanic any race	-.605	.527	1.318	1	.251	.546	.195	1.534
Ethn: non-White non-Hispanic or multi-racial	-.148	.413	.128	1	.721	.863	.384	1.938
Level of Education	.160	.250	.408	1	.523	1.173	.719	1.914
Perceived Org Support	.039	.008	22.789	1	.000	1.040	1.023	1.057
Composite PW	.047	.046	1.013	1	.314	1.048	.957	1.147
Constant	-3.266	1.389	5.527	1	.019	.038		

Note. PW = Perceived Wellness. Marital Status is for married compared to unmarried, gender is for males compared to females, and enlisted/officer is for officers compared to enlisted participants.

Then, the hierarchical logistic regression was run again with PW subscales replacing the composite. The full model of demographic variables, POS, and PW subscales to predict TI was statistically significant, $X^2(20) = 76.741$, $p < .001$. The addition of PW subscale to the prediction of TI led to a statistically significant increase in X^2 of 16.604, $p = .011$. The model explained 36.0% (Nagelkerke R^2) of the variance in turnover intention and correctly classified 74.2% of cases. Sensitivity was 73.0%, specificity was 75.4%, positive predictive value was 76.0%, and negative predictive value was 72.4%. Of

the 18 predictor variables, five were statistically significant: pay grade, enlisted/officer, POS, the emotional subscale, and the physical subscale (as shown in Table 7).

Table 7

Variables in the Full Logistic Regression Model with PW subscales

						Odds	95% CI for Odds Ratio	
	B	*SE*	Wald	df	*p*	Ratio	Lower	Upper
Branch: USAF/SF			3.792	2	.150			
Branch: Army	.320	.491	.425	1	.515	1.377	.526	3.607
Branch: USN/MC/CG	-.469	.537	.762	1	.383	.626	.218	1.792
Pay Grade	-.339	.172	3.873	1	.049	.712	.508	.999
Enlisted/Officer	3.702	1.767	4.388	1	.036	40.532	1.269	1294.625
Tenure (years)	.012	.060	.038	1	.846	1.012	.900	1.138
Number of Deployments	-.128	.091	2.003	1	.157	.879	.736	1.051
Marital Status	.188	.446	.178	1	.673	1.207	.504	2.890
Number of Dependents	.044	.166	.070	1	.791	1.045	.755	1.447
Age	.051	.057	.819	1	.366	1.053	.942	1.177
Gender	.704	.442	2.537	1	.111	2.022	.850	4.809
Ethn: White non-Hispanic			1.087	2	.581			
Ethn: Hispanic any race	-.555	.545	1.037	1	.309	.574	.198	1.670
Ethn: non-White non-Hispanic or multi-racial	.031	.430	.005	1	.943	1.031	.444	2.394
Level of Education	.152	.258	.348	1	.555	1.164	.703	1.929
Perceived Org Support	.038	.009	19.218	1	<.001	1.039	1.021	1.057
PW Psychological	-.115	.307	.140	1	.708	.892	.489	1.626
PW Emotional	-.679	.286	5.619	1	.018	.507	.289	.889
PW Social	-.225	.262	.734	1	.391	.799	.478	1.335
PW Physical	.504	.221	5.226	1	.022	1.656	1.075	2.552
PW Spiritual	.624	.358	3.033	1	.082	1.867	.925	3.768
PW Intellectual	.429	.315	1.856	1	.173	1.536	.828	2.848
Constant	-3.792	1.535	6.104	1	.013	.023		

Note. PW = Perceived Wellness. Marital Status is for married compared to unmarried, gender is for males compared to females, and enlisted/officer is for officers compared to enlisted participants.

A post-hoc logistic regression was then conducted to assess whether the three turnover belief variables added predictive value to the model. These were assessed via dichotomous questions asking whether participants believed: They would be eligible to remain in the military, they would be recommended for promotion the next time they are eligible, and that their military service served a

greater good. The addition of the turnover beliefs to the demographic variables and POS to the prediction of TI led to a statistically significant increase in X^2 of 25.127, $p < .001$. The further addition of the PW subscales led to a statistically significant increase in X^2 of 14.199, $p = .027$. The full model explained 44.7% (Nagelkerke R^2) of the variance in turnover intention and correctly classified 74.6% of cases. Sensitivity was 78.6%, specificity was 70.3%, positive predictive value was 73.9%, and negative predictive value was 75.5%. Of the 21 predictor variables, only four were statistically significant: POS, two of the turnover belief variables, eligibility and promotion, and the emotional subscale (as shown in Table 8).

Table 8

Variables in the Full Logistic Regression Model with PW subscales and Turnover Beliefs

						Odds	95% CI for Odds Ratio	
	B	*SE*	Wald	df	*p*	Ratio	Lower	Upper
Branch: USAF/SF			3.718	2	.156			
Branch: Army	.446	.521	.735	1	.391	1.562	.563	4.335
Branch: USN/MC/CG	-.403	.567	.504	1	.478	.668	.220	2.032
Pay Grade	-.302	.183	2.739	1	.098	.739	.517	1.057
Enlisted/Officer	3.439	1.890	3.311	1	.069	31.160	.767	1266.195
Tenure (years)	.048	.064	.561	1	.454	1.049	.925	1.189
Number of Deployments	-.173	.100	3.011	1	.083	.841	.692	1.023
Marital Status	-.219	.488	.202	1	.653	.803	.309	2.090
Number of Dependents	.091	.174	.276	1	.600	1.096	.779	1.541
Age	.064	.060	1.115	1	.291	1.066	.947	1.199
Gender	.921	.477	3.728	1	.053	2.511	.986	6.396
Ethn: White non-Hispanic			.556	2	.757			
Ethn: Hispanic any race	-.405	.583	.483	1	.487	.667	.213	2.091
Ethn: non-White non-Hispanic or multi-racial	.077	.464	.027	1	.869	1.080	.435	2.679
Level of Education	.119	.277	.186	1	.666	1.127	.655	1.938
Perceived Org Support	.035	.009	14.087	1	<.001	1.035	1.017	1.054
Turnover Belief: Eligibility	2.486	.824	9.111	1	.003	12.009	2.391	60.324
Turnover Belief: Promotion	1.309	.554	5.578	1	.018	3.702	1.249	10.969
Turnover Belief: Greater Good	.333	.409	.665	1	.415	1.396	.626	3.109
PW Psychological	.016	.327	.002	1	.961	1.016	.535	1.930
PW Emotional	-.690	.299	5.329	1	.021	.502	.279	.901
PW Social	-.267	.278	.927	1	.336	.765	.444	1.319
PW Physical	.438	.238	3.402	1	.065	1.550	.973	2.468
PW Spiritual	.352	.388	.823	1	.364	1.422	.665	3.041
PW Intellectual	.625	.343	3.328	1	.068	1.868	.955	3.655
Constant	-11.906	2.658	20.059	1	<.001	.000		

Note. PW = Perceived Wellness. Marital Status is for married compared to unmarried, gender is for males compared to females, and enlisted/officer is for officers compared to enlisted participants.

Summary

The results of the research question and sub-questions above provide varying levels of support for the research hypotheses. The first sub-question, which examined the differences in perceived wellness relative to differences in demographic variables, demonstrated that perceived wellness scores

were significantly higher for participants who were officers on the PWS composite and each subscale except physical. Participants who were married had significantly higher intellectual subscale scores. Women were also more likely to have higher PWS composite scores and psychological subscale scores. Additionally, participants with a 4-year degree or higher were shown to have higher wellness scores than those with less than a 4-year degree.

Additionally, it was also shown that individuals with more dependents living at home and with a higher pay grade had significantly higher wellness scores for each subscale, and that higher tenure was correlated with high psychological and spiritual subscale scores. It was also shown that participants with more dependents had higher psychological and emotional subscale scores, and participants who were older had significantly higher psychological, emotional spiritual, and intellectual subscale scores. However, individuals with higher tenure or were older had significantly lower physical wellness subscale scores.

The second sub-question, which explored how perceived wellness improved the prediction of turnover intention beyond perceived organizational support and demographic factors, provided support for the associated research hypothesis. PWS composite scores did not account for a significant amount of the variance in TI over and above that accounted for by SPOS scores and other demographic variables. However, when broken out, PWS subscale scores did add a statistically significant increase in the predictive value of the model over and above the demographic factors and SPOS scores. Additionally, turnover beliefs added a significant increase in the predictive value of the model, and in the final model, PWS subscale scores also added a significant increase as well. Overall, results indicated that although perceived organizational support was the best individual predictor of turnover intention, perceived wellness subfactor scores, but not composite scores, did predict turnover intention over and above perceived organizational support and demographic variables.

CHAPTER 5

DISCUSSION

Chapter one introduced the study, including the rationale, problem statement, significance of the study, research questions, and study specific terminology. Chapter two reviewed the relevant literature that covered retention and turnover in the military, turnover intention, and wellness in the military. The third chapter outlined the methodology used in this study to answer the research question and two associated sub-questions. Chapter three also covered participant selection and sampling, instrumentation, and data collection and analysis procedures. The results of these analyses were presented in chapter four. Chapter 5 will discuss the results of this study including the implications of the results, directions for future research, and limitations of this study.

Review of the Study

The aim of this study was to explore the relationships between perceived wellness and turnover intention while controlling for perceived organizational support and demographic variables. The purpose of this study was to contribute to the literature related to the constructs of wellness and turnover in the military while also exploring the role of turnover beliefs in the relationship between wellness and turnover intentions. The survey was conducted using electronic survey methods, with participants recruited through personal contacts and social media. Participants were recruited over a six-week period during January and February 2024. The hypothesized relationship between the variables of interest and support from the literature (Trachik et al., 2023) justified the use of a survey methodology.

The sample included 244 active duty service members from all branches of the U.S. military, representing a variety of ages, ranks, ethnocultural identities, and genders. Participants also indicated their beliefs about their turnover: whether they were likely to be eligible to remain in the military, whether they were likely to be recommended for promotion, and whether their military commitment served a greater good. The research questions of this study were addressed using a factorial MANOVA,

Spearman's correlation, and a hierarchical logistic regression with an exploratory factor analysis for validation, in IBM SPSS Statistics Software (Version 29).

Research Question and Hypotheses

Research Question. How does PWS predict TI when accounting for demographic variables, military context factors, and POS?

Sub-Question A. How do participants differ in PWS based on demographic traits and military context variables?

Hypothesis A. PWS scores will significantly differ ($p \leq .05$) based on demographic traits and military context variables.

Sub-Question B. Do scores on the PWS predict TI odds over and above the influence of demographic variables, military context variables, and POS?

Hypothesis B. PWS scores will predict ($p \leq .05$) TI over and above the influence of demographic variables, military context variables, and POS.

Major Findings

Perceived Wellness Model Validation

The Perceived Wellness Model (PWM) was evaluated for validity in a military population using an exploratory factor analysis (EFA) to understand the factor structure of perceived wellness as it is experienced by active duty service members, and as the theory upon which the PWS is based (Adams et al., 1997). Although the PWM suggests the existence of six distinct subfactors related to perceived wellness, the current study found that five subfactors emerged from the data. Further, when six-factors were extracted, the emerging structure revealed psychological and spiritual subfactors that were highly correlated, intellectual and social subfactors that were highly correlated, and an emotional subfactor that was highly correlated with the other four. Only the physical subfactor questions loaded as predicted onto a single subscale factor.

In addition, four items were substantially cross-loaded onto multiple factors, indicating that the six-subscale model may not be the best model for the population. Adams et al. (1997) likewise found that a single perceived wellness factor was most parsimonious in describing the structure of the PWS items even though the underlying PWM theorized six subfactors. However, results of this factor analysis suggest that there may be a better structure that includes at least one second-order factor to explain the high level of covariance among subfactors.

This finding is generally consistent with other research in wellness, however, which has only inconsistently supported the existence of theorized subfactors across wellness models (Roscoe, 2009), and specifically for the PWM (Adams et al., 1997; Harari et al., 2005). It is likewise consistent with the literature on similar constructs, like psychological wellbeing, which also has inconsistent support for a distinct subfactor structure, especially in a military population (Trachik et al., 2023). This may indicate that current wellness models, including the PWM and similar models, do not fit a military sample. Trachik et al. (2023) argued that unique military cultural and organizational factors may heavily influence the ways in which wellness constructs are experienced, making them difficult to capture via assessments that civilian-centric. However, the inconsistent evidence for wellness subfactors in general suggests that the difficulty in understanding how wellness is experienced is not unique to the military population.

Sub-Question A

Sub-question A was answered using a Spearman correlation matrix and a series of factorial MANOVAs, one-way MANOVAs to explore whether there were any differences in PWS scores based on demographic and military context factors. The correlation results suggested that pay grade, number of dependents, tenure, and age are associated with higher levels of wellness on 2 or more subscales each, with the exception of tenure and age also being associated with lower levels of physical wellness. This is consistent with the hypothesis that service members who are more likely to thrive in the military

context are also more likely to stay in longer, resulting in thriving service members with higher age, tenure, pay grade, and number of dependents. It also seems likely that higher tenure service members would also have more deployments, however almost half of respondents indicated that they had never deployed during their military careers. It is also notable that service members who are older reported lower levels of physical wellness since participants were all relatively young; the oldest participant was 50 years old, with the median age being 32.5. It would be interesting to see if a similar pattern emerges in the general population over this same age range, or if the nature of military service accelerates the deterioration of physical wellness.

MANOVA results suggested that officers had higher wellness scores than enlisted troops, that women had higher wellness scores than men, and that service members with a bachelor's degree or higher had higher wellness scores than those with less than a 4-year degree. However, it should be noted that although 78 women completed the survey, the vast majority of them were in the Air Force or Space Force (n = 57) and were officers (n = 57), indicating that the differences seen between genders may actually be attributable to differences between enlisted and officer corps, between branches, or both.

Sub-Question B

The second sub-question used a series of hierarchical logistic regressions to analyze the ability to predict turnover intention (TI) based on demographics, perceived organizational support (POS), turnover beliefs, and perceived wellness. The demographic factors were entered into the model in the first step, followed by POS, then turnover beliefs (when applicable), with PWS scores were entered into the last step.

The results were significant at each step with two notable exceptions. First, the demographic variables alone could not significantly predict turnover intention. Second, the PWS composite score did not significantly add predictive value to the model. Only when broken out into subfactor scores did PWS

significantly add predictive value to the model over and above demographics and SPOS. Another notable result is that the addition of turnover beliefs improved the predictive value of the model overall and had a moderating/mediating effect on the relationship between PWS subscale scores and TI. This indicates that service members with higher perceived wellness are more likely to stay in the military, but that their career self-efficacy beliefs and/or an occupation-versus-career orientation may determine how the retention decision is conceptualized by the service member.

Study Implications

Results of this study suggest that wellness is a paradigm that can be of particular use to the military community, but similar to PWB, current models may not adequately capture military cultural factors that affect how service members experience and understand wellness. Although other evidence-based wellness assessments may prove to better support their underlying theoretical models in an active duty population, it seems likely that other models would experience the same validation issues as the PWM (in this study) and psychological wellbeing (Trachik et al., 2023). Specifically, unique military cultural and organizational factors (e.g., indoctrination during onboarding training, frequent relocations, unique autonomy and agency factors) may require special consideration when assessing wellness among active duty troops. Additionally, military identity development may play a role in the conceptualization of wellness, particularly because of how the warrior ethos affects perceptions of weakness, the expression of emotions, and personal sacrifice for the good of the organization. The acculturation into a military identity may lead to unique social desirability factors that played a role in the results of this study, and in the perceptions of wellness in the military in general.

Another implication of this study is that occupational wellness factors may play a larger role in overall wellness than was theorized by the PWM and may provide additional insight into the prediction of TI. The inclusion of occupational wellness items in other wellness models (e.g., Myers & Sweeney, 2008) suggests that this is not unique to the military, but the extent of its importance may be. The clear

link that POS has with both wellness and TI and the additional predictive power that the turnover beliefs added to the regression model suggest that additional occupational wellness items beyond eligibility for retention, promotion recommendation, and purpose in service may be worth exploring as predictive factors or as worthwhile additions to a holistic wellness assessment.

The results of this study also suggest that a wellness model that emerges from a military population may better align with the way in which service members conceptualize wellness and may provide information that is more applicable to an active duty lifestyle. For example, a military wellness model may be able to address the conceptual overlap between psychological, spiritual, emotional, social, and spiritual wellness as service members seem to experience it, especially in contrast with the clear distinction that characterized physical wellness in the study. For example, a model that incorporates the unique aspects of military service (e.g., autonomy, agency, readiness and the deployment cycle, etc.) and occupational wellness may better reflect how wellness is conceptualized by members of the military. Although it is uncertain whether distinct wellness subfactors remain consistent across populations, the incorporation of military-specific factors into wellness models used with the military could help to improve the validity and applicability of wellness with this special population.

Implications for Counselors and Counselor Educators

Serving the military population requires an understanding of the unique cultural and occupational factors that service members are accustomed to and work within. Wellness models used with military clients should be adapted to include an understanding of these unique factors that separate them from civilians. The results of current wellness assessments may not fully capture the aspects of wellness that are most salient to service members. There is advocacy work to be done with military populations that involves not only addressing the barriers they face in accessing mental healthcare, but also enabling providers to better understand the issues that servicemembers face and

how they are experienced by the service members themselves, which may not match well with literature on civilian populations.

There is also an opportunity for counselors to advocate for service members by helping understand their own military identity and the warrior ethos, particularly how it separates service members and veterans from civilians and creates a marginalization effect that limits the applicability of civilian research. Particularly as service members prepare to separate from the military, there is an opportunity to educate them on this aspect of the military-to-civilian transition. Likewise, counselors could advocate for the military organization as a whole to better prepare and assist transitioning service members in understanding the post-service ramifications of the military identity development they have undergone. This is especially true for enlisted service members, who are generally younger and less-educated when they join, and who may be less likely to have developed an identity outside of military service by the time they separate.

Strengths and Limitations

A strength of this study was its timeliness for research into military wellness. National attention to military wellness has been increasing over the last several years, as has the incorporation of professional counselors as mental healthcare providers for the military. It is important to expand the literature that helps counselors understand the military population and that helps stakeholders understand the unique benefits that professional counselors can provide. A second strength of this study was the validation of the PWS, which not only provided support for other research arguing for the development of military-specific wellness assessments (Trachik et al., 2023), but also showed that wellness is a useful model for the military that has room to improve in its applicability for this specific population.

However, there are important limitations to consider when interpreting the results in addition to the limitations presented in chapter 3. First, large differences in group sizes necessitated breaking the

analyses down into smaller parts, which limits the generalizability of the differences seen between demographic groups. Additionally, although the factor analysis showed that although there were enough participants to conduct a factor analysis, only five of the 36 items had data that was individually suitable for the EFA, indicating that a larger sample size may have changed the results of the EFA. Another potential limitation was that unlike in other studies, the wording of instrument items was not changed to increase clarity for a military population. Extemporaneous feedback received from multiple participants indicated that questions for some items seemed ambiguous, particularly among the SPOS items, in that they were not sure if "the organization" referred to their local units or their service branch as a whole. Wording was left as-is to allow participants to ascribe their own meaning to questions as they deemed appropriate, but some participants indicated that they would have benefitted from wording that was clearer in the military context.

Another limitation for this study was the demographic composition of the sample, which differed from the demographic composition of active duty as a whole. For example, officers, women, White participants, and soldiers were overrepresented in the sample, which made some of the sample sizes too small to analyze when evaluating for interactions with other demographic variables. Therefore, although previous research has consistently shown that there is predictive value in demographic variables regarding TI, those results were not replicated in the present study. Additionally, some of the differences that were identified between demographic groups may actually be attributable to confounding covariance due to disparate sample group sizes. This limitation reflected a lack of official military support and a lack of diversity among gatekeepers and collaborators, which limited the author's ability to reach and recruit a diverse sample. This further restricted the applicability of the study's findings, particularly across the demographic groups that were underrepresented in the sample compared to the military overall.

Recommendations for Future Research

The results of this study highlight the need for the validation of other wellness models with military populations to understand how wellness is affected by the unique military cultural context. Specifically, developing a better understanding of the intersection among cultures of origin within the development of military cultural identity could provide additional insight into how differences among demographic groups emerge and the impacts they make on military wellness and turnover. The inability to reach enough participants of various demographic groups to find expected significant influences suggests that there is a phenomenon occurring at the intersection of demographic and military cultural identities that is worth exploring.

Additionally, the incorporation of unique cultural and occupational factors into a military-specific wellness model could provide evidence for a consistent subfactor structure that both explains and predicts wellness concerns across the population. Qualitative inquiry seeking to understand the lived experiences of service members working to maintain wellness could also help to develop a new model of wellness that emerges from the military population itself. A qualitative study like this, that asks service members to describe the aspects of their lives that keep them well, would be the next step in developing a valid military wellness scale.

Further studies on perceived wellness in the military could also seek to replicate or expand upon these findings with a different or larger sample that may provide a clearer picture than could be obtained in the current study. Additionally, studies that incorporate more emphasis on career theory could provide greater insight into the link between occupational factors and wellness, and their combined influence on turnover in the military.

Conclusions

The results of this study support the hypothesis that there is a significant relationship between organizational support, wellness, and turnover in the military. Moreover, the study seems to support the

hypothesis that perceived wellness is useful in predicting turnover intentions even when accounting for perceived organizational support and demographic factors. This finding seems to indicate that service members who exhibit greater wellness are less likely to leave military service, and that military-specific cultural and occupational factors partially mediate and moderate that relationship. Further research should be conducted that further explores this connection and seeks to incorporate military-specific factors into wellness that generates a model that more accurately depicts holistic wellness among service members. Additionally, the military and counseling profession could benefit from additional research on the impact that career and life factors have on holistic wellness and retention.

REFERENCES

Adams, T., Bezner, J., Garner, L., & Woodruff, S. (1998). Construct validation of the perceived wellness survey. *American Journal of Health Studies*, *14*(4), 212-219.

Adams, T., Bezner, J., & Steinhardt, M. (1997). The conceptualization and measurement of perceived wellness: Integrating balance across and within dimensions. *American Journal of health promotion*, *11*(3), 208-218.

American Counseling Association. (2014). *2014 ACA code of ethics*. https://www.counseling.org/docs/default-source/default-document-library/2014-code-of-ethics-finaladdress.pdf

Anderson, B. K., Meyer, J. P., Goldenberg, I., & Laplante, J. (2022). Development and evolution of commitment profiles among military recruits: Implications for turnover intention and well-being. *Military Psychology*, *34*(5), 570-590. https://doi.org/10.1080/08995605.2021.2022910

Archer, L. E., & Alagaraja, M. (2021). Examining burnout in the US military with a focus on US Air Force: A review of literature. *New Horizons in Adult Education and Human Resource Development*, *33*(4), 17-32. https://doi.org/10.1002/nha3.20331

Asch, B. J. (2019). *Setting military compensation to support recruitment, retention, and performance* (Report No. RR-3197-A). RAND Corporation.

Asch, B. J., Romley, J. A., & Totten, M. (2005). *The quality of personnel in the enlisted ranks* (Publication No. MG-324-OSD). RAND Corporation.

Barnes, J. B., Nickerson, A., Adler, A. B., & Litz, B. T. (2013). Perceived military organizational support and peacekeeper distress: A longitudinal investigation. *Psychological Services, 10*(2), 177–185. https://doi.org/10.1037/a0032607

Beck, A. T., Epstein, N., Brown, G., & Steer, R. (1993). Beck anxiety inventory. *Journal of consulting and clinical psychology*.

Beck, A. T., Steer, R. A., & Brown, G. (1996). Beck depression inventory–II. *Psychological assessment*.

Bergmann, J. S., Renshaw, K. D., & Paige, L. (2019). Psychological well-being in Iraq and Afghanistan veterans: Risk and protective factors. *Psychological Trauma: Theory, Research, Practice, and Policy, 11*(4), 434–441. https://doi.org/10.1037/tra0000416

Booth-Kewley, S., Dell'Acqua, R. G., & Thomsen, C. J. (2017). Factors affecting organizational commitment in Navy Corpsmen. *Military Medicine*, *182*(7), e1794-e1800. https://doi.org/10.7205/MILMED-D-16-00316

Box, G. E. P., & Tidwell, P. W. (1962). Transformation of the independent variables. *Technometrics*, *4*, 531-550.

Brown, N. J. (2023). A critical examination of the US Army's Comprehensive Soldier Fitness program. *The Winnower*. https://doi.org/10.15200/winn.143751.17496

Brown, B. A., Goodman, F. R., Pietrzak, R. H., & Rottenberg, J. (2022). Psychological well-being in US veterans with non-fatal suicide attempts: A multi-cohort population-based study. *Journal of affective disorders*, *314*, 34-43. https://doi.org/10.1016/j.jad.2022.07.003

Capon, J., Chernyshenko, O. S., & Stark, S. (2007). Applicability of civilian retention theory in the New Zealand military. *New Zealand Journal of Psychology*, *36*(1), 50.

Carrola, P., & Corbin-Burdick, M. (2015). Counseling military veterans: Advocating for culturally competent and holistic interventions. *Journal of Mental Health Counseling*, *37*(1), 1-14.

Chow W. K., & Polich, M. J. (1980). Models of the first-term reenlistment decision (Report No. R-2468-MRAL). RAND Corporation.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Earlbaum Associates.

Cornum, R., Matthews, M. D., & Seligman, M. E. (2011). Comprehensive soldier fitness: building resilience in a challenging institutional context. *American psychologist*, *66*(1), 4.

https://doi.org/10.1037/a0021420

Coumbe, A. T. (2010). Army officer development: Historical context. *Fort Monroe, VA*.

Creswell, J. W., & Creswell, J. D. (2020). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage publications.

Department of Defense (DoD). (2019). *2019 Status of forces survey of active duty members (SOFS-A) leading indicators briefing: Retention, satisfaction, tempo, stress, and Readiness.* https://www.opa.mil/research-analysis/quality-of-work-life/status-of-forces-survey-reports-briefings/predictors-of-retention-intentions-among-active-duty-service-members/

Department of Defense (DoD). (2022). *Demographics profile of the military community.* *https://news.usni.org/2023/11/29/department-of-defense-2022-demographic-profile*

Dickstein, B. D., McLean, C. P., Mintz, J., Conoscenti, L. M., Steenkamp, M. M., Benson, T. A., ... & Litz, B. T. (2010). Unit cohesion and PTSD symptom severity in Air Force medical personnel. *Military medicine*, *175*(7), 482-486. https://doi.org/10.7205/MILMED-D-09-00178

Dupré, K. E., & Day, A. L. (2007). The effects of supportive management and job quality on the turnover intentions and health of military personnel. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in Alliance with the Society of Human Resources Management*, *46*(2), 185-201.

Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology, 75*(1), 51–59. https://doi.org/10.1037/0021-9010.75.1.51

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied psychology*, *71*(3), 500.

Enns, J. H. (1975). *Effect of the variable reenlistment bonus on reenlistment rates: Empirical results for FY 1971* (Publication No. R-1502-ARPA). RAND Corporation.

Farkas, A. J., & Tetrick, L. E. (1989). A three-wave longitudinal analysis of the causal ordering of satisfaction and commitment on turnover decisions. *Journal of Applied Psychology*, *74*(6), 855.

Goldberg, M. S. (2001). A survey of enlisted retention: Models and findings (Report No. D0004085.A2). Alexandria VA: CNA Corporation.

Gonzalez, G. C., Singh, R., Schell, T. L., & Weinick, R. M. (2014). An evaluation of the implementation and perceived utility of the airman resilience training program. *Rand Health Quarterly*, *4*(2).

Gotz, G. A., & McCall, J. J. (1984). *A dynamic retention model for air force officers: Theory and estimates* (Publication No. R-3028-AF). RAND Corporation.

Government Accountability Office. (1999). Military personnel perspectives of surveyed service members in retention critical specialties. (GAO Publication No. NSIAD-99-197BR). Washington, D.C.: U.S. Government Printing Office.

Government Accountability Office. (2020). Female active-duty personnel: guidance and plans needed for recruitment and retention efforts. (GAO Publication No. GAO-20-61). Washington, D.C.: U.S. Government Printing Office.

Green, D. E., Walkey, F. H., McCormick, I. A., & Taylor, A. J. (1988). *Hopkins Symptom Checklist—21* [Database record]. APA Psychtests.

Grinston, M. A., McConville, J. C., & McCarthy, R. D. (2019). The army people strategy. Department of Defense.

Hale, T. M. (1990). *Antecedent variables of military turnover* (Publication No. 9025961) [Doctoral dissertation, George Mason University]. ProQuest Dissertations & Theses Global.

Harari, M. J., Waehler, C. A., & Rogers, J. R. (2005). An empirical investigation of a theoretically based measure of perceived wellness. *Journal of Counseling Psychology*, *52*(1), 93. https://doi.org/10.1037/0022-0167.52.1.93

Harrington, D., Bean, N., Pintello, D., & Mathews, D. (2001). Job satisfaction and burnout: Predictors of

intentions to leave a job in a military setting. *Administration in social work*, *25*(3), 1-16. https://doi.org/10.1300/J147v25n03_01

Hattke, F., Vogel, R., & Znanewitz, J. (2018). Satisfied with red tape? Leadership, civic duty, and career intention in the military. *Public Management Review*, *20*(4), 563-586.

Hays, D. G., & Singh, A. A. (2011). *Qualitative inquiry in clinical and educational settings*. Guilford Press.

Hettler, B. (1984). Wellness: Encouraging a lifetime pursuit of excellence. *Health values*, *8*(4), 13-17.

Hogue, L., & Miller, B. J. (2020). Harnessing Inertia to Improve Army Enlisted Service Length: A Case for Opt-Out Enlistment Contracts. *Armed Forces & Society*, *46*(1), 116-131. https://doi.org/10.1177/0095327X18785380

Huffman, A. H., Adler, A. B., Dolan, C. A., & Castro, C. A. (2005). The impact of operations tempo on turnover intentions of army personnel. *Military Psychology*, *17*(3), 175-202. https://doi.org/10.1207/s15327876mp1703_4

Huffman, A. H., & Olson, K. J. (2016). Gender differences in perceptions of resources and turnover intentions of work-linked couples in masculine occupations. *Stress and Health*, *33*(4), 309-321. https://doi.org/10.1002/smi.2709

Hutchison, S. (1997). Perceived organizational support: Further evidence of construct validity. *Educational and Psychological Measurement*, *57*(6), 1025-1034. https://doi.org/10.1177/0013164497057006011

Jiang, K., Hong, Y., McKay, P. F., Avery, D. R., Wilson, D. C., & Volpone, S. D. (2015). Retaining employees through anti–sexual harassment practices: Exploring the mediating role of psychological distress and employee engagement. *Human Resource Management*, *54*(1), 1-21. https://doi.org/10.1002/hrm.21585

Jolliffe, I. T. (1986). Principal component analysis. Springer.

Kaiser, H. F. (1970). A second-generation little jiffy. *Psychometrika*, 35, 401-415.

Kaiser, H. F., & Rice, J. (1974). Little jiffy, mark IV. *Educational and psychological measurement*, *34*(1), 111-117. https://doi.org/10.1177/001316447403400115

Kaplan, D. M., Tarvydas, V. M., & Gladding, S. T. (2014). 20/20: A vision for the future of counseling: The new consensus definition of counseling. *Journal of Counseling & Development*, *92*(3), 366-372. https://doi.org/10.1002/j.1556-6678.2011.tb00101.x

Kelley, C. L., Britt, T. W., Adler, A. B., & Bliese, P. D. (2014). Perceived organizational support, posttraumatic stress disorder symptoms, and stigma in soldiers returning from combat. *Psychological Services, 11*(2), 229–234. https://doi.org/10.1037/a0034892

Lancaster, S. L., Erbes, C. R., Kumpula, M. J., Ferrier-Auerbach, A., Arbisi, P. A., & Polusny, M. A. (2013). Longitudinal predictors of desire to re-enlist in the military among male and female national guard soldiers. *Military medicine*, *178*(3), 267-273. https://doi.org/10.7205/MILMED-D-12-00147

Langkamer, K. L., & Ervin, K. S. (2008). Psychological climate, organizational commitment and morale: Implications for Army captains' career intent. *Military psychology*, *20*(4), 219-236. https://doi.org/10.1080/08995600802345113

Laurence, J. H. (2014). The military performance of GED holders. In Heckman, J. J., Humphries, J. E., & Kautz, T. (Eds.). *The myth of achievement tests: The GED and the role of character in American life*. University of Chicago Press.

Maan, A. T., Abid, G., Butt, T. H., Ashfaq, F., & Ahmed, S. (2020). Perceived organizational support and job satisfaction: a moderated mediation model of proactive personality and psychological empowerment. *Future Business Journal*, *6*, 1-12. https://doi.org/10.1186/s43093-020-00027-8

Marrone, J. V. (2020). *Predicting 36-month attrition in the US military* (Publication No. RR-4258-OSD). RAND Corporation.

McCalla, M. E., Rakoff, S. H., Doering, Z. D., Mahoney, B. S. (1986). Description of Officers and Enlisted

Personnel in the US Armed Forces, 1985: A Report Based on the 1985 DoD Survey of Officer and Enlisted Personnel (Report No. AD-A177-682). Arlington, VA: Defense Manpower Data Center.

McDonald, J. L., Ganulin, M. L., Dretsch, M. N., Taylor, M. R., & Cabrera, O. A. (2020). Assessing the well-being of sexual minority soldiers at a military academic institution. *Military medicine*, *185*(Suppl. 1), 342-347.

McMahon, C. J., & Bernard, C. J. (2019). Storm clouds on the horizon. *Naval War College Review*, *72*(3), 84-100.

Meadows, S. O., Miller, L. L., & Robson, S. (2015). *Airman and family resilience: Lessons from the scientific literature* (Report No. RR-106-AF). RAND Corporation.

Motowidlo, S. J., Dowell, B. E., Hopp, M. A., Borman, W. C., Johnson, P. D., & Dunnette, M. D. (1976). *Motivation, satisfaction, and morale in army careers: A review of theory and measurement* (Report No. TR-76-A7). Personnel Decisions, Inc.

Motowidlo, S. J., & Lawton, G. W. (1984). Affective and cognitive factors in soldiers' reenlistment decisions. *Journal of Applied Psychology*, *69*(1), 157.

Mullen, M. (2010). On total force fitness in war and peace. *Military Medicine*, *175*(Suppl. 8), 1-2.

Myers, J. E., & Sweeney, T. J. (2005). *Counseling for wellness: Theory, research, and practice*. American Counseling Association.

Myers, J. E., & Sweeney, T. J. (2008). Wellness counseling: The evidence base for practice. *Journal of Counseling & Development*, *86*(4), 482-493.

Page, K. M., & Vella-Brodrick, D. A. (2009). The 'what', 'why' and 'how' of employee well-being: A new model. *Social indicators research*, *90*, 441-458. https://doi.org/10.1007/s11205-008-9270-3

Prosek, E. A., Burgin, E. E., Atkins, K. M., Wehrman, J. D., Fenell, D. L., Carter, C., & Green, L. (2018). Competencies for counseling military populations. *Journal of Military and Government Counseling*, *6*(2), 87-99.

Rakoff, S. H., Griffith, J. D., & Zarkin, G. A. (1994). *Models of soldier retention* (Report No. AD-A282-670). US Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Robson, C., & McCartan, K. (2016). *Real world research* (4th ed.). Wiley.

Roscoe, L. J. (2009). Wellness: A review of theory and measurement for counselors. *Journal of Counseling & Development*, *87*(2), 216-226. https://doi.org/10.1002/j.1556-6678.2009.tb00570.x

Rosen, L. N., & Durand, D. B. (1995). The family factor and retention among married soldiers deployed in Operation Desert Storm. *Military Psychology*, *7*(4), 221-234.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069-1081. https://doi.org/10.1037/0022-3514.57.6.1069

Ryff, C. D. (2013). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and psychosomatics*, *83*(1), 10-28. https://doi.org/10.1159/000353263

Sachau, D. A., Gertz, J., Matsch, M., Palmer, A. J., & Englert, D. (2012). Work-life conflict and organizational support in a military law enforcement agency. *Journal of Police and Criminal Psychology*, *27*, 63-72. https://doi.org/10.1007/s11896-011-9095-x

Sapsford, R. (2007). *Survey research* (2nd ed.). Thousand Oaks, CA: Sage.

Seguin, T. C., Bjornsen-Ramig, A. L., Blount, A. J., & Dinkel, D. M. (2018). A Wellness approach to investigating student veterans' career goals. *Journal of Military and Government Counseling*, *6*(2), 138-153.

Seligman, M. (2010). Flourish: Positive psychology and positive interventions. *The Tanner lectures on human values*, *31*(4), 1-56.

Soper, D.S. (2023). A-priori Sample Size Calculator for Hierarchical Multiple Regression [Software].

Available from https://www.danielsoper.com/statcalc

Steel, R. P., Shane, G. S., & Griffeth, R. W. (1990). Correcting turnover statistics for comparative analysis. *Academy of Management Journal*, *33*(1), 179-187.

Stetz, M. C., Castro, C. A., & Bliese, P. D. (2007). The impact of deactivation uncertainty, workload, and organizational constraints on reservists' psychological well-being and turnover intentions. *Military Medicine*, *172*(6), 576-580.

Suicide Prevention and Response Independent Review Committee (SPRIRC). (2022). Preventing suicide in the U.S. Military: Recommendations from the suicide prevention and response independent review committee. https://media.defense.gov/2023/Feb/24/2003167430/-1/-1/0/SPRIRC-FINAL-REPORT.PDF

Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics* (6th ed.). Harlow, England: Pearson.

Teplitzky, M. L. (1991). *Junior Army officer retention intentions: A path analytic model* (Publication No. AD-A242-094). US Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Trachik, B., Fawver, B., Trapp, S. K., Goldberg, S. B., Ganulin, M. L., Kearns, N. T., McKeon, A. B., Dretsch, M. N., & Sowden, W. J. (2023). Measurement validity of the six-factor model of psychological well-being in a military sample: Implications for measuring well-being in service members. *Psychological Assessment, 35*(9), 729–739. https://doi.org/10.1037/pas0001239

Trachik, B., Oakey-Frost, N., Ganulin, M. L., Adler, A. B., Dretsch, M. N., Cabrera, O. A., & Tucker, R. P. (2021). Military suicide prevention: The importance of leadership behaviors as an upstream suicide prevention target. Suicide & Life-Threatening Behavior, 51(2), 316–324. https://doi.org/10.1111/sltb.12707

U.S. Census Bureau. (2022). *Race: About.* Retrieved from: http://census.gov/topics/population/race/about.html

Vasterling, J. J., Proctor, S. P., Aslan, M., Ko, J., Jakupcak, M., Harte, C. B., ... & Concato, J. (2015). Military, demographic, and psychosocial predictors of military retention in enlisted army soldiers 12 months after deployment to Iraq. *Military medicine*, *180*(5), 524-532. https://doi.org/10.7205/MILMED-D-14-00468

Weinick, R. M., Beckjord, E. B., Farmer, C. M., Martin, L. T., Gillen, E. M., Acosta, J., ... & Scharf, D. M. (2011). *Programs addressing psychological health and traumatic brain injury among US military servicemembers and their families* (Report No. TR-950-OSD). RAND Corporation.

Wilcox, V. L. (2000). Burnout in military personnel. In F. D. Jones (Ed.), *Military psychiatry: Preparing in peace for war* (pp. 31–50). Office of the Surgeon General, US Department of the Army.

Wong, G. Y., & Mason, W. M. (1985). The hierarchical logistic regression model for multilevel analysis. *Journal of the American Statistical Association*, *80*(391), 513-524. https://doi.org/10.1080/01621459.1985.10478148

World Health Organization (WHO). (2021). *Health promotion glossary of terms 2021.* Geneva: World Health Organization.

Yamada, A. M., Atuel, H. R., & Weiss, E. L. (2013). Military culture and multicultural diversity among military service members: Implications for mental health providers. In *Handbook of multicultural mental health* (pp. 389-410). Academic Press. https://doi.org/10.1016/B978-0-12-394420-7.00020-5

Zarei, S. (2019). Mediating role of job involvement in the relationship between work-family conflict and perceived organizational support with turnover intention among military personnel. *Counseling Culture and Psycotherapy*, *10*(37), 171-198. https://doi.org/10.22054/qccpc.2019.35350.1949

APPENDIX A

Informed Consent

PROJECT TITLE: Wellness as a predictor of turnover intention in the active duty military.

INTRODUCTION

The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES. The research involves the completion of a survey that should take approximately 10 minutes. This survey will ask you to self-assess your perception of your wellness, your perception of your support from your military organization, and whether you intend to remain in the military after the expiration of your current service obligation, along with your demographic information.

RESEARCHERS

Primary Researcher:
Thomas Seguin, LPC, Old Dominion University, College of Education, Department of Counseling & Human Services

Responsible Project Investigator:
Jeffry Moe, PhD, Old Dominion University, College of Education, Department of Counseling & Human Services

DESCRIPTION OF RESEARCH STUDY

It is known that wellness-related factors are influential in the decision to quit or stay at a job, but it is unknown whether total wellness is useful in predicting the intent to stay in or separate from the military, and whether it is a better predictor than other factors, like perceived organizational support or demographic variables. This study aims to explore the relationship between perceived wellness, perceived organizational support, demographic factors, and turnover intention, and to better understand the relationships between the domains of wellness, among active duty military members.

RISKS AND BENEFITS

RISKS: With participation in any research there are risks of discomfort in reporting beliefs. Data will remain confidential and anonymous. The researchers will reduce risks by removing any linking identifying information when reporting on results. And, as with any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS: There are no benefits for your participation in this study.

COSTS AND PAYMENTS

None.

NEW INFORMATION

If the researchers find new information during this study that would reasonably change your decision about participating, then they will inform you.

CONFIDENTIALITY

All information obtained about you in this study is strictly confidential unless disclosure is required by law. The results of this study may be used in reports, presentations and publications, but the researcher will not identify you personally.

VOLUNTARY CONSENT AND WITHDRAWAL PRIVILEGE

It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the study -- at any time. The researchers reserve the right to withdraw your participation in this study, at any time, if they observe potential problems with your continued participation.

QUESTIONS

In the event that you have questions or concerns as a result of participation in any research project, you may contact Dr. Jeffry Moe at jmoe@odu.edu or Dr. Petros Katsioloudis, Chair of the Darden College of Education Human Subjects Review Committee, Old Dominion University, at pkatsiol@odu.edu, who will be glad to review the matter with you.

APPENDIX B

Demographic Survey

D1: Are you currently an active duty member of the United States military?
- Yes
- No

D2: What is your service component?
- Active
- Reserve
- National Guard

D3: What is your branch of service?
- Air Force
- Army
- Coast Guard
- Marine Corps
- Navy
- Space Force

D4: What is your current pay grade?
- E1
- E2
- E3
- E4
- E5
- E6
- E7
- E8
- E9
- W1
- W2
- W3
- W4
- O1
- O2
- O3
- O4
- O5
- O6
- O7
- O8
- O9
- O10

D5: How many years have you completed on active duty?
- [Enter a number]

D6: How many times have you deployed to participate in combat operations?
- [Enter a number]

D7: Are you currently married?
- Yes
- No

D8: How many dependents do you live with (including spouse, if applicable)?
- [Enter a number]

D9: What is your age?
- [Enter a number]

D10: What is your gender?
- Man or male-identified
- Woman or female-identified
- Transgender
- None of these

D11: What is your ethnocultural identity (select all that apply)?
- American Indian or Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or other Pacific Islander
- White
- Some other identity

D12: What is the highest level of education you have completed?
- Did not graduate high school
- High school equivalency/GED
- Graduated high school
- Some college, no degree
- Associate's degree
- Bachelor's degree
- Master's degree
- Professional degree
- Doctoral degree

D13: Do you believe you will be eligible to continue to serve in the military after the end of your current service obligation?
- Yes
- No

D14: Do believe you will most likely be recommended for promotion the next time you are eligible?
- Yes
- No

D15: In general, do you believe that your military service required personal sacrifices from you that effectively served the greater good?

- Yes
- No

D16: Do you intend to stay in the military after the end of your current service obligation?

- Yes
- No

VITA

Thomas C. Seguin, PhD, LPC, CCMHC

tsegu001@odu.edu

ODU Department of Counseling & Human Services, 2100 New Ed Bldg, Hampton Blvd, Norfolk, VA 23529

Education

Doctor of Philosophy. Counselor Education & Supervision, Old Dominion University (ODU), Norfolk, VA (CACREP) – 2024; Dissertation: *Wellness as a predictor of turnover intention in the active duty military*

Master of Arts. Clinical Mental Health Counseling, University of Nebraska at Omaha (UNO), Omaha, NE (CACREP) – 2017; Thesis: *A wellness approach to investigating student veterans' academic and career goals*

Associate of Applied Science. Communication Applications Technology, Community College of the Air Force, Montgomery AL, 2014

Associate of Arts. Korean Language, Defense Language Institute Foreign Language Center, Monterey, CA, 2012

Bachelor of Arts. Psychology, Miami University, Oxford, OH – 2009