

EXAMINING THE RELATIONSHIPS BETWEEN MILITARY SERVICE, OCCUPATION,
RESILIENCE, AND SUCCESSFUL AGING FOR OLDER U.S. MILITARY VETERANS:
A MIXED METHODS STUDY

Amanda L. Carroll

A dissertation submitted to the faculty of the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in the Division of Occupational Science and Occupational Therapy
in the Allied Health Sciences Department of the School of Medicine.

Chapel Hill
2021

Approved by:

Antoine Bailliard

Nancy Bagatell

Twylla Kirchen

Todd Jensen

Jenny Womack

©2021
Amanda L. Carroll
ALL RIGHTS RESERVED

ABSTRACT

Amanda L. Carroll: Examining the Relationships between Military Service, Occupation, and Successful Aging for Older U.S. Military Veterans: A Mixed Methods Study
(Under the direction of Antoine Bailliard)

Participation in occupation during military service can have a long-term impact on the health, well-being and successful aging of older U.S. military veterans. The aging literature has shown that older U.S. military veterans may be more resilient and aging more successfully than the general older adult population. Within occupational science, little is known about the occupational participation and successful aging of older U.S. military veterans. The purpose of this transformative sequential explanatory mixed methods study was to examine the relationships between military service, occupational participation, resilience and successful aging in older U.S. military veterans. First, these relationships were examined using cross-sectional survey assessments. The study sample was comprised of majority older U.S. Marine Corps veterans. Survey results showed occupational participation, may foster resilience among older veterans. Results also indicated that older female veterans may be aging more successful than their male counterparts. This study also substantiates prior evidence that older veterans tend to appraise their military experience as positive despite exposure to combat and aging with service-connected disabilities. Qualitative life history calendar interviews were then completed to shed light on the mechanisms behind the broad patterns identified by the quantitative results. Findings from the qualitative phase highlighted the positive long-term impact of military service through the inclusion of older veterans' first-person perspectives. Three primary themes were identified: (1) Family Ties, (2) Military Identity, and (3) Resilience. Findings showcased the role of military

social bonds, the salience of military identity for Marine Corps and Navy veterans, and the process of resilience in understanding the impact of participation in military service on the life course. Integrated findings contribute to the scant literature on the occupations of older U.S. military veterans as occupational beings and can inform future research and interventions aimed at enhancing the occupational participation, resilience, and successful aging of this population.

To my mom,
For all the time I've spent in school, I've learned the most from you.
Thank you for teaching me I was beautiful not because of how I looked,
but because of how I thought.

ACKNOWLEDGEMENTS

I would like to express my gratitude to all of my committee members. Your mentorship and guidance during this project were invaluable and I have learned so much from each of you. I appreciate your support, feedback, and suggestions as I have explored the ideas central to this project for the last six years.

Thank you also to my parents, family, and friends for always believing in me and cheering me on.

Finally, thank you to all of the Veterans I have worked with, both for this project, and in my work as an OT. Your resilience and ability to find the positive in life inspired this project. Thank you for sharing your stories with me.

TABLE OF CONTENTS

LIST OF TABLES	xi
LIST OF FIGURES	xii
CHAPTER 1: INTRODUCTION	1
Aging of U.S. Veteran Population	1
An Occupational Perspective	4
Applying an Occupational Perspective to Older Adults	5
Long-Term Outcomes of Participation in Military Service	7
Aims and Significance	9
CHAPTER 2: A REVIEW OF THE CURRENT LITERATURE.....	12
Life Course and Aging Scholarship Focused on Older U.S. Military Veterans	12
Timing of Service	13
Combat Experience.....	14
Positive Perceptions of Military Service.....	15
Vietnam Veterans' Health.....	15
Minority Veterans' Health	17
The Study of U.S. Military Veterans in OT/OS.....	21
The Constructs of Military Service, Occupation, Resilience, and Successful Aging	23
Military Service	23
Occupation	26
Resilience.....	27

Successful Aging	30
CHAPTER 3: GUIDING THEORETICAL PERSPECTIVES	34
Transformative Paradigm.....	34
The Life Course Perspective.....	37
The Transactional Perspective	40
CHAPTER 4: OVERALL SEQUENTIAL MIXED METHODS DESIGN.....	43
Mixed Methods.....	43
Sequential Explanatory Design.....	46
Recruitment.....	48
Inclusion/Exclusion Criteria	49
Impact of COVID-19	49
Screening and Consent.....	50
CHAPTER 5: MEASURING THE RELATIONSHIPS BETWEEN MILITARY SERVICE, OCCUPATIONAL PARTICIPATION, RESILIENCE, AND SUCCESSFUL AGING.....	51
Phase 1: Quantitative Procedures.....	51
Measures	51
Quantitative Analysis.....	54
Quantitative Results	56
Demographics	56
Descriptive Statistics of Main Study Variables	58
Relationships Between Occupational Participation, Resilience, and Successful Aging	63
Demographic Group Differences of Main Study Variables	63
Discussion.....	64
Relationship Between Occupational Participation and Resilience	64

Relationship Between Gender and Successful Aging.....	67
Positive Appraisal of Military Service.....	69
Limitations	70
CHAPTER 6: LIFE HISTORY INTERVIEWS.....	73
Phase 2: Qualitative Procedures.....	73
Modifications Due to COVID-19	73
Life History Calendar Interviews.....	74
Reflexive Journaling	76
Qualitative Analysis.....	77
Rigor, Trustworthiness, and Researcher Positionality	79
Findings.....	83
Participants.....	83
Themes	85
Discussion.....	113
Integration of Findings with Existing Knowledge.....	113
Limitations	124
CHAPTER 7: INTEGRATED DISCUSSION & CONCLUSION	126
Integration of Quantitative Results and Qualitative Findings.....	126
Sequential Explanatory Design.....	126
Integration Strategies	128
Addressing the Research Gaps.....	137
Understudied Segments of the Veteran Population	138
Positive Long-Term Outcomes of Military Service.....	139
Factors That Promote Resilience and Successful Aging for Older Veterans	140

Integrated Understandings of the Relationships Between Military Service, Occupation, Resilience, and Successful Aging.....	141
Mixed Methods Research Examining Occupation, Resilience, and Successful Aging	144
Implications for Future Research and Practice	145
Conclusion	148
APPENDIX A: SEQUENTIAL EXPLANATORY STUDY DESIGN PHASES	149
APPENDIX B: SEMI-STRUCTURED LIFE HISTORY CALENDAR INTERVIEW GUIDE.....	150
APPENDIX C: LIFE HISTORY CALENDAR	154
REFERENCES	155

LIST OF TABLES

Table 1: Description of Mixed-Methods Measurement Study Constructs	48
Table 2: Participant Demographics (N=41).....	56
Table 3: MAPA-Activity Participation by Type of Activity (N=41)	59
Table 4: MAPA-Activity Participation Meaning by Type of Activity (N=41)	61
Table 5: Descriptive Statistics and Correlations for Study Variables (N=41).....	63
Table 6: Comparison of Means for Occupational Participation and Resilience.....	66
Table 7: Phases of Qualitative Analysis	78
Table 8: Phase 2 Participant Demographics	84
Table 9: Themes and Subthemes with Illustrative Quotes.....	85
Table 10: Summary of Key Findings from Two Phases of Study	128
Table 11: Sequential Expansion: Interpretations of Coordinated Results	129
Table 12: Cases of Dissonance	134
Table 13: Addressing the Research Gaps	138

LIST OF FIGURES

Figure 1: Sequential Explanatory.....	46
---------------------------------------	----

CHAPTER 1: INTRODUCTION

Aging of U.S. Veteran Population

The topic of aging well is both relevant and pressing given the number of older adults in the United States (U.S.) is growing and projected to outnumber children by the year 2035 (U.S. Census Bureau, 2018a). U.S. military veterans represent a rapidly growing subpopulation of the overall older adult population (U.S. Department of Veterans Affairs, 2017). Older veterans, aged 65 and above, are estimated to represent 50% of the overall 18.2 million veterans living in the country today (U.S. Census Bureau, 2018b). In the next decade, the number of older veterans is projected to continue increasing and represent the largest age group among the overall veteran population (Schaffer, 2021). In terms of healthcare needs, The U.S. Department of Veterans Affairs (VA) reported in 2020 that older veterans accounted for about half of the 9 million veterans currently enrolled in veterans' health care programs. Those aged 75 and above are expected to grow to represent a third of those receiving care from the VA in the next decade, and the number of veterans aged 85 or older receiving care from VA health services is expected to grow more than five times over the next two decades (Shane, 2020).

As a group, older U.S. military veterans are a unique subpopulation due to variation in military branches (e.g., Marine Corps, Army, Navy), military experiences (e.g., training, education, deployments, duty stations, combat), wartime eras (e.g., Vietnam War, Korean War, Gulf War), and health-specific issues (e.g., post-traumatic stress disorder, agent orange exposure, Gulf War syndrome) associated with those eras (Olenick et al., 2015). Of particular salience for this group is that past occupational participation in military service can have lifelong effects on

trajectories of health and well-being throughout the life course (Wilmoth et al., 2013). As a result, there is an increasing impetus to better understand how experiences during military service shape the health and well-being of older U.S. military veterans in the long term (Spiro III et al., 2016). Despite this need, researchers argue that older U.S. military veterans represent an understudied segment of the aging population (Spiro III et al., 2016; Pruchno, 2016). Failure to study this group could result in increasingly worse health outcomes for older veterans in later life as well as a potential overburdening of VA healthcare system resources.

For example, a review by Wilmoth and London (2016) of military-related articles published in major aging-related journals in the past 30 years found a dearth of research on the long-term effects of military service on health and well-being in later life. The authors identified 101 military-related articles over the 30-year period which translates into a rate of 3.0 articles per year, representing less than 1% of the nearly 12,000 total articles published in the major aging focused journals. The authors argued these statistics are disconcerting given that much of what is known about aging processes is based on scientific evidence generated since the middle of the twentieth century when military service was prevalent among the samples of men upon which this evidence is based. The evidence base regarding the long-term effects of military service then is both dated and based upon cohorts of veterans from World War II (WWII) and the Korean War. The extent to which findings from these studies are applicable across veteran cohorts is unclear. This is significant given predominant understandings of the long-term effects of military service based upon cohorts from WWII and the Korean War are currently being used to generalize to today's older veterans. This generalization fails to account for how the long-term effects of military service vary by veteran cohorts' military service experiences such as serving in WWII vs. serving in the Vietnam War. Additionally, military service has become a less

normative experience in the U.S. which has implications for understanding the impact of service as veterans age.

Lack of research in this area is also troubling since one survey found that over half of older U.S. military veterans reported difficulty in daily functioning and fair or poor health (Villa et al., 2003). There is a need then to promote the occupational participation and overall health and well-being of older veterans as they age that is currently not being addressed. Additionally, research has shown that veterans experience mental health disorders, post-traumatic stress, and traumatic brain injury at disproportionate rates compared to their civilian counterparts (Olenick et al., 2015). Scholars have also noted that the small body of research on older veterans has many empirical limitations. The majority of published studies, including Villa et al. (2003), are outdated and constrained by large cross-sectional survey designs, narrowly focused on one long-term outcome, have an overrepresentation of veterans from Department of Veterans Affairs (VA) healthcare facilities and programs (Spiro III et al., 2016; Wilmoth & London, 2016), and fail to reflect on how health in later life varies based on differences in military service experiences (Wilmoth et al., 2013). Interventions based on this line of evidence may not be applicable to the whole older veteran population given not all veterans utilize the VA for healthcare services and not all veterans had the same military experiences. These differences need to be considered when tailoring interventions to best promote the health and well-being of all older veterans.

Scholars further critique the over-emphasis on negative and short-term outcomes of military service in existing research (Spiro III et al., 2016). This focus on the short-term negative outcomes of warzone deployment fails to capture how military service shapes veteran's lives in the long-term or account for the full spectrum of negative, positive, and null outcomes.

While research has shown that military service can result in negative outcomes, there is growing recognition of the profound positive effects on health and well-being across the life course (Spiro et al., 2016). This has implications for the healthcare services that veterans receive. If the research guiding clinical practice and interventions with older veterans solely focuses on negative outcomes, this prevents the use of strengths-based approaches that can capitalize on positive outcomes to support health and well-being. A gap exists then in the evidence base that is focused on the positive effects on health and well-being gained through occupational participation in military roles that develop over time or may emerge in later life (Davison et al., 2016; MacLean & Elder, 2007; Spiro III et al., 2016).

An Occupational Perspective

To address the gap identified in the previous section, this study employs an occupational perspective to focus on how the everyday doing of veterans, their occupational participation, has a positive impact on their health and well-being in older age. The relationship between occupational participation and health and well-being is a foundational premise of occupational science (Yerxa et al., 1989; Wilcock, 1993). Participation in occupation – human doing, being, and becoming- directly impacts the health or illness of individuals (Wilcock, 1991; 1998). This study will employ Wilcock’s (1998) definition of occupation as doing, being, and becoming and will assume that “occupation is the natural biological mechanism for health” (p. 2). This definition reflects that occupation and health are intricately linked to larger societal contexts. Understanding the connection between occupation, health and well-being requires attention to how occupation is situated and shaped by social, cultural, political, and economic contexts (Dickie et al., 2006; Hocking, 2000; Yerxa et al., 1989). These contextual and environmental factors shape opportunities for participation in occupation, expectations for who should

participate in certain occupations, and how individuals choose occupations (Laliberte Rudman, 2010; Stadnyk et al., 2010; Wilcock, 1998).

Contexts also shape the meaning of participation in certain occupations as well as how individuals and collectives engage in occupations (Bailliard, 2016; Clark et al., 1991; Cutchin, 2007; Reed et al, 2010). Contexts are not entirely deterministic of occupational outcomes, instead individuals and collectives exercise situated agency within larger contexts through negotiation of their occupational participation (Angell, 2014; Laliberte Rudman, 2012). Given the complex relationships connecting individual and environment through occupation, a comprehensive understanding of the relationship between occupation, health and well-being requires contextualized research focused on occupational participation as emerging and in-process through the embeddedness of people in their everyday contexts (Kantartzis & Molineux, 2010).

Applying an Occupational Perspective to Older Adults

In older adulthood, participation in everyday occupations is associated with aging well through the promotion of health, function, and well-being (Clark et al., 1997; Laliberte Rudman, 2012; Menec, 2003). Heatwole Shank & Cutchin (2010) found that older adults aging in place negotiate and adjust their occupational participation in the face of challenges experienced during older adulthood. When faced with loss, uncertainty, and multiple challenges in their home environment, older adults negotiated these adversities in ways that allowed for continuation of participation in valued occupations. This continued participation contributed to their overall well-being and health as they experienced aging in place (Heatwole Shank & Cutchin, 2010). While occupational scientists have discussed the link between occupation and health for older adults, Wright-St. Clair (2012) called attention to the need for occupational science to deepen it's

understanding of the interplay between occupation and aging well. She argued that in order to understand the health promoting mechanisms of occupational participation, researchers must move beyond quantitative measures embracing the use of more nuanced methods to capture the contextual and temporal connections between past, present, and future occupational participation. Capturing these connections can help to inform interventions that promote health through occupational participation in older age.

Wright St. Clair (2012) cautioned that sole use of quantitative measures of occupation, such as activity checklists, result in a prescriptive rather than situated understanding of the relationship between occupation and health and well-being in older adulthood. Using such measures is prescriptive in assuming an a priori understanding of older adults' occupation as existing categories of occupation are used to measure occupational participation. In her own study, Wright St. Clair (2012) illustrated how the methods used to collect data on occupation shape the data that are produced and the understandings derived from them. Taking a broad approach, she examined what occupations matter most to older adults, how they experienced these occupations, and how those factors impact healthy aging using individual interviews focused on stories of everyday moments and photographs of the participant's hands while engaged in a chosen occupation. The older adults in her study experienced a decline in occupational participation in later life; however, they reported that their decline in participation was not as important as engaging in occupations that mattered the most to their sense of identity, connected them to their past, and provided them with something to look forward to each day. These aspects of occupation were attributed by the older adults as most influential to their overall health and well-being. Wright St. Clair's (2012) findings demonstrate that occupation may serve as a protective factor for aging well and elucidate the need for qualitative and mixed method

approaches to capture the tacit and situated nature of occupation in older adulthood. Her findings further point to the limitations of solely approaching the study of occupation from quantitative approaches that just measure overall levels of occupational participation without probing further.

Long-Term Outcomes of Participation in Military Service

Just as occupational scientists have begun to elucidate how occupational participation can impact the health and wellbeing of older adults in a number of ways, there is growing recognition among life course scholars that participation in military service occupations can result in a spectrum of long-term outcomes both positive and negative. Military service is increasingly being understood as a double-edged sword resulting in both negative and positive outcomes for older U.S. military veterans across the life course (Spiro III et al., 2016). A small vein of scholarship has investigated military service as a potential protective factor for older U.S. military veterans. Older veterans' positive appraisals of their military experiences and the development of resilience through participation in military related occupations have been found to positively influence their health and well-being in older adulthood (Aldwin et al., 1994; Davison et al., 2016; Settersen et al., 2018; Spiro III et al., 2016). A study assessing how well older U.S. military veterans were aging found that 82% of veterans rated themselves as aging successfully (Pietrzak et al., 2014) compared to 27-60% in general samples of older adults (Depp & Jeste, 2006). Similarly, 70% of older U.S. military veterans who endured a high number of traumatic experiences throughout their lifetime considered themselves highly resilient in later life (Pietrzak & Cook, 2013) compared to 14-35% of the general older adult population (MacLeod et al., 2016). Participation in meaningful daily occupations was strongly associated with higher rates of resilience and successful aging for the older veterans in both these studies (MacLeod et al., 2016; Pietrzak & Cook, 2013).

On the other hand, evidence exists that military service is a risk factor for impaired or vulnerable aging (Aldwin et al., 2018). Older U.S. military veterans were found to experience more rapid age-related declines after retirement age (Wilmoth et al., 2010). Those aging with a service-related disability had low self-rated health throughout later life (Wilmoth et al., 2018). Compared to non-combat veterans and civilians, older combat veterans had higher levels of smoking, poorer self-related health, greater stress levels, and more psychological distress (Aldwin et al., 2018). In one study, older U.S. military veterans also exhibited significantly accelerated declines in cognitive functioning compared to civilians (Stawski et al., 2018). These findings further come into perspective considering a third of all living veterans have experienced combat exposure, 16% have a service-related disability, and 70% of Vietnam veterans report aging with a disability (U.S. Department of Veterans Affairs, 2016). Wilmoth et al. (2018) explained that while research findings demonstrate older veterans have different later-life health outcomes than nonveterans, these observed health and well-being differences are currently not well explained. Wilmoth et al. also point out that some of these variations could be due to the characteristics of military service and post service experiences which must be considered in future research.

In sum, research over the past two decades on older U.S. military veterans' points to the need for a more dynamic approach to understanding the multifaceted nature of military service, its full range of potential outcomes, and the factors that promote veterans' health and well-being as they age. Additionally, there is a need to better understand how these long-term outcomes vary based on individual experiences of military service (role in the military, combat exposure, education and training, etc.). Due to the heterogeneity of military experiences, it is important to

consider how the effects of military service unfold across the life course and are shaped by larger societal contexts (Wilmoth et al., 2018).

Aims and Significance

The central research question guiding this study was: *What are the relationships between military service, occupational participation, resilience, and successful aging for older U.S. military veterans?* To better understand the unfolding impact of military service over time and in context, a mixed-methods approach was used capture the complex nature of the occupational experiences of older U.S. military veterans and how these experiences influence a full range of outcomes in later-life. An exploratory mixed methods design was employed given the conflicting and limited amount of research regarding the long-term outcomes of military service. A transformative explanatory sequential mixed methods design was employed for this study consisting of two distinct phases. In the first quantitative phase cross-sectional survey data was collected to empirically examine the relationships between military service, occupational participation, resilience, and successful aging for older U.S. military veterans. In the second qualitative phase, life-history interviews were used to explore in-depth older veterans' perceptions regarding their military experience and its long-term effects on their life-course and successful aging.

This study had two specific aims aligned with each phase of the sequential explanatory design. The first aim was to measure the relationships between military service, occupational participation, resilience and successful aging for a sample of older U.S. military veterans. This phase allowed me to use the quantitative data and results to identify a general picture of the relationships between these constructs. The second aim was to explore and describe older veterans' perceptions of their life history, military experience, occupational participation,

resilience, and successful aging. The qualitative data and analysis refined and explained the statistical results by exploring more in depth the participants' views regarding the relationships between the study constructs. Together, these two phases, using mixed methods, provided a more robust approach to understanding the trends and details of the dynamic and complex impact of participation in military service on the lives of older veterans over time.

This project is significant because the veteran population in the U.S. is quickly aging. To effectively support older veterans as they grow older, it is necessary to know more about how participation in military service impacts their lives over time. Recognition of these processes is necessary to promote the health and wellbeing of veterans as they age. Findings from this study may serve to inform interventions, programs and policies that aim to support older veterans as they age. Exploring the relationships between military service, occupational participation, resilience, and successful aging will reveal connections regarding the long-term impact of military service on the life course. Identification of connections between these constructs will illuminate opportunities for intervention as well as policies to support this unique population. To illustrate, camaraderie is often identified in the veteran literature as an important form of social connection and support that veterans' value from their time in service (Burnell et al., 2016). Interventions that provide opportunities for social participation through peer support for older veterans by other veterans may contribute to their resilience and successful aging in older adulthood.

This study also has theoretical significance. For occupational science theory, identifying the occupational mechanisms that impact the resilience process of older veterans holds great potential for occupational science. Studying the relationship of occupation and resilience can contribute to an increased understanding of the relationship between occupation and health and

well-being. An understanding of this relationship may be generalizable and have implications for the health and well-being of many populations beyond older veterans. Furthermore, a deeper understanding of how participation in occupation and serving in the military may act as protective factors for aging well offers a positive and strengths-based approach to the study of older veterans. A strengths-based approach is necessary to capitalize on the potentially positive long-term impact of military service to support older veterans' health and well-being. A strengths-based approach further respects older veterans' dignity as human beings and promotes agency through choice and inclusion.

Beyond importance in the academic and clinical worlds, this study is also personally significant. I am the granddaughter, daughter, sister, niece, cousin, and friend of veterans. I have family members that are aging veterans. I have worked with many older veterans in my clinical practice first as a fieldwork student at the North Carolina State Veterans Home and then as an occupational therapist in home health and skilled nursing settings throughout the South East. As a therapist, I shared my background growing up in a military town and having many family members that served with older veterans I worked with. I was genuinely interested in their military experiences and asked the older veterans about their time in service and how serving influenced their lives. I witnessed the power of listening to their stories and how doing so had a positive impact on our rapport and therapeutic outcomes. In my clinical experience, the older veterans I worked with often seemed to be coping better with health impairments than their civilian counterparts despite experiencing many adversities in their lives which they shared with me. I realize that, in some form, I have always been attuned and interested in how the military as a social institution impacts people's everyday lives. My clinical experiences further strengthened this interest and are the foundation for the design of this study.

CHAPTER 2: A REVIEW OF THE CURRENT LITERATURE

This literature review will be divided into three sections. The first section will feature pertinent life course and aging literature focused on older U.S. military veterans. The second section will discuss literature within occupational science (OS) and occupational therapy (OT) focused on U.S. military veterans. The third section will highlight select literature related to the constructs of military service, occupation, resilience, and successful aging.

Life Course and Aging Scholarship Focused on Older U.S. Military Veterans

Most research on the impact of military service to date has focused on the short-term and negative effects of warzone deployment, especially the mental and physical injuries of those who served in combat (Spiro III et al., 2016). While there are undoubtedly negative consequences of serving in the military, this line of scholarship has cast a negative overall portrayal of military service that fails to capture how serving shapes veteran's lives in the long-term or account for a full spectrum of outcomes. To encourage scholars to hone in on military service as an important variable in understanding the aging of older veterans, Spiro III et al. (2016) called for use of the life course perspective as a means of re-envisioning the positive role military service plays in shaping lives. The life course perspective offers a more holistic alternative for understanding the impact of military service on the health and well-being of veterans. Collectively, this vein of scholarship is building an evidence base that considers the U.S. military as a critical social institution that shapes the life course trajectories and long-term outcomes of veterans who serve (Wilmoth & London, 2013), and that can result in profound positive effects on their health and well-being (Spiro et al., 2016).

Timing of Service

A significant influence on veterans' long-term outcomes is the timing of their service during their life course (Elder et al., 1994). Elder (1998) described enlisting in military service during adolescence as a developmental turning point with early entry providing more benefits than later entry during adulthood. He found that, for many veterans, enlisting earlier offered a break with the past, opened the door to new possibilities, and provided opportunities for personal growth. Younger WWII veterans who entered into service during adolescence had better long-term outcomes for stable employment and marriage than those who entered into service during adulthood (Elder et al., 1994). Those that entered into service during adolescence and were from economically and socially disadvantaged backgrounds had greater positive long-term economic outcomes compared to civilians and other veterans (Sampson & Laub, 2006). For this group, the military provided an “unprecedented opportunity to better their lives through on-the-job training and further education” (Sampson & Laub, 1996, p. 364). In addition to gaining valuable skills this cohort experienced a separation from their disadvantaged past that provided an avenue for upward social mobility through military service. For those that did not come from economically or socially disadvantaged backgrounds, use of the G.I. Bill was the greatest predictor of greater positive long-term outcomes for occupational and socioeconomic attainment in later life (Sampson & Laub, 1996).

It is important to note though that many veterans entered into service during adulthood. As a result of different historical periods and conflicts in U.S. history, men have entered into service either through conscription via a draft mechanism or by volunteering at many different ages of adulthood (Selective Service System, 2021). For example, in 1940 the U.S. instituted the Selective Training and Service Act which required all men between the ages of 21 to 45 to

register for the draft in order to conscript an army for World War II (Vergun, 2020). As a result of this legislation, men were drafted or enlisted at varying ages and stages of the life course (Elder, 1998). Elder et al. (1994) found that WWII veterans who entered into service as adults (e.g., already married and working in a career) experienced more disruption of roles and routines, and were challenged when faced with re-entry into the civilian sector after the war. Specifically, they experienced difficulty returning to previous occupational and family roles and routines, and experienced more negative health changes than veterans who entered into service during adolescence.

Combat Experience

In addition to the timing of service, the impact of combat experience has also been investigated by life course scholars. Combat experience has lifelong implications for veterans physically, psychologically, and socially (Davison et al., 2006; Settersen, 2006; McLean & Elder, 2007). Settersen (2006) found that up to 50 years after combat, combat experiences continue to have an impact on the health and well-being of older veterans. For some, trauma from combat may remain dormant until certain age-related declines trigger or retrigger symptoms (Settersen, 2006). For example, research has shown that the onset of cognitive difficulties can exacerbate and trigger the re-emergence of PTSD symptoms for some older veterans (Mota et al., 2012). Davison and colleagues (2016) also suggested that combat veterans confront and rework their wartime memories later in life. Reengaging with trauma later in life can lead to positive personal growth through reframing and meaning making or lead to distress and poor mental health. Although veterans' long-term outcomes vary depending on the historical context and conflict era, combat veterans across cohorts are more likely to divorce, have lifelong

impairments in mental and physical health, and higher mortality in later life. (MacLean & Elder, 2007).

Positive Perceptions of Military Service

Life course research has also shown that older veterans' report positive perceptions of their time in military service and these positive perceptions impact their overall health and well-being (Aldwin et al., 1994; Settersen et al., 2018; Spiro III et al., 2016). Although many older veterans experienced combat and many are aging with a service-connected disability, they still overwhelmingly reported positive perceptions of their time in service (Settersen, 2006).

Older veterans also have positive perceptions regarding how they are aging. Two studies based on The U.S. Veterans' Administration (VA) longitudinal sample found that 82% of older U.S. military veterans reported themselves to be aging successfully, and 70% reported themselves as resilient in older adulthood (Pietzrak et al., 2014; Pietzrak & Cook, 2013). Additionally, older veterans reported overall better self-rated health than non-veterans in older adulthood (Choi et al., 2016).

Vietnam Veterans' Health

Most study samples of older U.S. military veterans have been recruited from the cohorts of WWII and the Korean War, and recruited specialized samples of veterans who use VA hospitals (Wilmoth et al., 2010). This is problematic as veterans from the Vietnam and Gulf Wars, not WWII or the Korean War, currently make up the two largest cohorts of veterans (National Center for Veterans Analysis and Statistics, 2016). Veterans from the Vietnam war are an understudied cohort among the older veteran population. Currently, they represent the largest cohort of veterans in the U.S. accounting for around 60% of the veteran population aged 65 and above (National Center for Veterans Analysis and Statistics, 2016). Researchers have suggested

that the unique experiences of Vietnam veterans problematize generalizing extant literature on other veteran cohorts to Vietnam veterans. This cohort of veterans experienced compounding threats to their health and well-being given the nature of fighting in a war without a clear front line, the controversial nature of the war, and the hostile reception they received upon returning home which made reintegration into civilian life challenging (Marini et al., 2019). Additionally, benefits of military service that were identified in previous veteran cohorts (e.g., socioeconomic and educational attainment, marital stability, and health outcomes) were not similarly experienced by Vietnam veterans (London, 2016; Wilmoth & London, 2016).

Compared to other veteran cohorts, the negative effects of military service on health and well-being may be more pronounced for those that served in Vietnam (Brown, 2018). While only 50% of these veterans served in combat, the literature shows they fare worse in health during older age than nonveterans (Dobkin & Shabani, 2009) including having more health conditions, worse psychological outcomes, and higher mortality rates than WWII veterans (Dohrenwend et al., 2006; Wilmoth et al., 2010). However, a growing line of research shows that Vietnam veterans demonstrate high self-reported resilience as they age (Aldwin et al., 1994; Marini et al., 2019; Marmar et al., 2015). Additionally, researchers have argued there is substantial heterogeneity among this group of veterans and thus a need to better understand how their military experiences shape their health and well-being in older age (Marini et al., Wilmoth & London, 2016).

As evidenced by the uniqueness of the Vietnam veteran cohort, attention to the heterogeneity of military experiences calls for a more complete understanding of how military service and health varies across veteran cohorts (Wilmoth et al., 2018). Indeed, research must incorporate factors beyond whether a veteran served in the military to also include the location

and duration of service, combat experience, other adverse events and stressors that were experienced during service (Pruchno, 2016). Findings from one veteran cohort may not be generalizable to other cohorts given both changes in the military over time (e.g., move to an all-volunteer force, advances in military medicine, family-friendly policies), as well as the unique contexts of each service era and combat operations. In addition to accounting for different aspects of time in military service, greater attention to interindividual variability in older U.S. military veterans is needed.

Minority Veterans' Health

While older white males have been extensively studied (Lutz, 2013), other segments of the older veteran population have received less much attention. Cohorts of women, members of the lesbian, gay, bisexual, transgender and queer (LGBTQ) community, and ethnic and racial minorities are growing in numbers among the older veteran population. The impact of military service on the health and well-being of these minority groups has not been sufficiently studied. It is especially important to know more about how military service impacts the health and well-being of these groups given they may be at higher risk of mental and physical ill health in the context of serving in a masculine, heteronormative, and white dominated social institution. Minority stress theory explains there are possible negative effects of serving in the military as a minority given these groups stigmatized status with greater exposure to stressors that could include instances of bullying, sexual assault, harassment, and continued historical or current effects of structural and cultural discrimination (Burks, 2011; Lucas et al., 2018; Meyer, 2003). These experiences may lead to poorer health outcomes for minority groups both during their time in service and as they age.

As a minority group in the military, women veterans currently account for more than 2 million of the almost 22 million U.S. veterans alive today (U.S. Department of Veterans Affairs, 2019). The number of women veterans aged 65 and older is expected to grow quickly with a striking expected increase of 83% in the number of older women veterans from 2014 to 2025 (National Center for Veterans Analysis and Statistics, 2016). This overall increase has been fueled by a steady increase in the number of women joining the military over the past 30 years (Department of Veterans Affairs, 2011). With the advent of the All-Volunteer Force (AVF) in 1973 the military began recruiting more women as there were not enough men volunteers to meet the manpower requirements of a volunteer military (Iskara, 2010) While their early roles were in nursing, technical, mechanical, communication, and clerical positions, women are now eligible to serve in an expanded number of roles including previously limited combat roles (U.S. Government Accountability Office, 2015). Despite initiatives by the VA to identify and target women veterans' health related needs, there is still a large gap in knowledge regarding the long-term impact of military service on the health and well-being of women veterans as they age as most existing research has focused on younger women veterans below the age of 65 (Kang et al., 2014; Reiber & LaCroix, 2016; Yano et al., 2011).

One study focused on understanding how different cohorts of women veterans are aging found older women veterans from the Vietnam, Korea, and WWII eras have multiple medical conditions and the highest prevalence of specialty care use compared to younger women veteran cohorts (Washington et al., 2013). Another study found WWII and Korea era women veterans had double the prevalence of fair or poor overall health status compared with Vietnam era women veterans (Bean-Mayberry et al., 2013). Compared to their non-veteran peers, one study found older women veterans aged 80 and older reported significantly lower perceived health,

physical functioning, and quality of life (LaCroix et al., 2016). This study also found older women veterans had a higher risk of mortality before the age of 80 than non-veteran older women. Despite these studies, scholars have argued more research is needed to better understand the full spectrum of long-term outcomes for older women veterans given some of the positive aspects of military service, such as access to healthcare and higher levels of occupational and educational attainment for women which may make older women veterans more resilient in the face of age-related declines and chronic disease (Reiber & LaCroix, 2016).

In addition to women veterans, the impact of military service on the health and well-being of LGBTQ veterans has also been understudied. Historically, LGBTQ persons that served in the military were not allowed to disclose their sexual orientation without risk of dismissal due to discriminatory policies (Goldbach & Castro, 2016). The highly controversial Don't Ask Don't Tell Policy (DADT) of the U.S. military, repealed in 2011, created a culture of suppression and discrimination against non-heterosexuality in the military (Britton & Williams, 1995). The current generation then of older veterans that identify as LGBTQ were required to lie about their sexual orientation in order to serve their country. Given this, there are no studies to date that estimate the number of older veterans who identify as LGBTQ, and few that focus on their experiences (Proctor & Krusen, 2017).

One qualitative study by Proctor & Krusen (2017) investigated the experiences of seven gay and bisexual older male veterans. Participants described having to wait to “come out” or disclose their sexual orientation until after their time in service ended. They noted the difficulty of serving in the military as a heteronormative social institution and having to lie or keep their sexual orientation a secret for years. These experiences were described as traumatic and often led to impaired mental health and alcohol and drug abuse in later life. A recent review of the

literature focused on LGBTQ military individuals, those of all ages serving currently and veterans, also called attention to the unique health risks of LGBTQ military personnel (Mark et al., 2019). The review found that overall based on the literature, LGBTQ military personnel and veterans have poorer mental health and well-being; report more stigma and barriers to mental healthcare, which reduces uptake of available healthcare services; experience more sexual trauma; and have poorer physical health than heterosexual military personnel and veterans (Mark et al., 2019). Given this, more research is needed to understand the possible negative and positive effects on health and well-being of serving in the military on sexual minorities and how these effects play out in older adulthood.

Along with women and LGBTQ veterans, racial and ethnic minority veterans are another growing veteran subpopulation. Racial and ethnic minority veterans currently make up 20% of the total veteran population and are predicted to increase 30% by 2030 (National Center for Veterans Analysis and Statistics, 2016). Of concern is that compared to white veterans, African American and Hispanic veterans report lower self-rated health indicating the persistence of racial/ethnic health disparities among veterans (Choi et al., 2016). For example, Cheng et al. (2020) found a higher incidence of Alzheimer's disease and Alzheimer's disease-related dementias among older African American veterans compared to older white veterans, which is a consistent health disparity also found in the general civilian population.

On another note, research focused on older African American veterans' perspectives of their time in service shows some positive effects on health and well-being. One study reported older African American veterans that served in WWII, Korea, and Vietnam all reported overwhelmingly positive perceptions of their time in service, despite experiencing racism both in broad society and in the military while serving (Black, 2015). Veterans in this study described

their military experience as a positive turning point in their lives, indicating that participation in war contributed to both personal and professional growth (e.g., personal pride in serving, increased education and training, forging of friendships). Given the increase in diversity and recruitment policies directly targeting minority group populations (Mark et al., 2019), it is important for future research to further investigate how race, ethnicity, gender, and sexual orientation intersect with military service and aging to shape the health and well-being of older minority veterans.

The Study of U.S. Military Veterans in OT/OS

According to Wilmoth and London (2013), there is a gap in the literature base on aging exploring the experience of older U.S. military veterans. A scoping review I completed in 2018 found a similar gap exists within the OT/OS literature base. I found that research in OS/OT has primarily focused on the reintegration and readjustment of veterans from the wars in Iraq and Afghanistan: Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). These cohorts exhibit such high rates of mental illness (i.e., post-traumatic stress disorder (PTSD), depression and mild traumatic brain injury (mTBI)) that those conditions have been labeled the signature wounds of OEF and OIF (Tanielian & Jaycock, 2008). There is a dearth of literature studying underrepresented segments of the veteran population including older veterans, minority service members and veterans, and military families (Carroll, 2018).

Within the OS/OT literature two studies exist that focused on older U.S. military veterans. In the first, Kirchen & Hersch (2015) used in-depth interviews to understand the personal and environmental factors that facilitated the adaptation of ten older male veterans to long-term care in the institutional setting of a skilled nursing facility. Results highlighted the enduring salience of military culture as participants reported feeling more comfortable in the

long-term care facility because they were amongst fellow veterans. Participants described social bonds as an integral part of their military experience and reported a desire to reminisce about past military experiences with other veterans. However, participants also felt socially isolated due to other residents being nonverbal, age differences between veterans, and a lack of choice and opportunities to socialize during their daily routines. All participants reported both positive and negative experiences during military service, but all stated they would not change having served and would choose to do so again. Participants added that staff at their long-term care facility would benefit from an increased understanding of military culture. Participants noted professionalism in manner and dress, routine, privacy in close quarters, and pride in doing a job well were all important aspects of military culture they acquired during their time in service and continued to value. Staff education focused on learning more about military culture broadly and these aspects specifically could help improve staff's ability to provide a welcome cultural environment for the participants as well as increase rapport between staff and the veterans through deeper understanding of how military experiences shapes the lives of each veteran. Staff education then could potentially facilitate adaptation to long-term care as well as increased well-being for older U.S. military veterans.

In the second study identified, Kirchen et al. (2014) evaluated the effectiveness of an Occupation-based Cultural Heritage Intervention-Military Version (OBCHI-MV). The purpose of the intervention was to facilitate the adaptation of ten older male U.S. military veterans to a state-funded veterans' long-term care home. The original intervention was developed by the second authors of the study and was adapted for Kirchen et al.'s study to be culturally relevant for veterans and informed by an understanding that military culture uniquely shapes an individual's experiences and worldviews. Data analyses of pre and post-test measures of

depression, quality of life (QOL), health status, occupational engagement, and social participation did not reveal statistically significant results. However, results from the Yesterday Interview and post-intervention survey indicated that the intervention may have the potential to improve QOL, occupational engagement, and social participation for veterans who have recently transitioned to long-term care. Results of the qualitative interviews suggested that military-related social connections developed during the intervention led to an increase in social participation and occupational engagement post-intervention. The authors hypothesized this increase in participation could have the potential to improve QOL for veterans who have recently transitioned to long-term care. Participants noted that the intervention group sessions gave them an avenue to share past military experiences and feel connected to each other through their military service.

The Constructs of Military Service, Occupation, Resilience, and Successful Aging

In this section, the four main constructs of interest for this study (a) military service, (b) occupation, (c) resilience, and (d) successful aging will be defined and discussed. The definition and understanding of each of these constructs is discussed for the purposes of this study.

Military Service

As a social institution, the U.S. military has a significant impact on the lives of those who serve. Military service has enduring effects on the life course that can shape the health and well-being of veterans as they age (Wilmoth & London, 2013). In the U.S., military service is defined as service by an individual who either volunteers or was drafted to actively serve in the armed forces for a contracted period of time (Adler & Castro, 2010). In order to serve, an individual must meet citizenship, age, education, and health and fitness requirements (U.S. Department of Defense, 2020). The enlisted service member learns a job specialty and does hands-on work

during their period of service for one of the six branches of the military (U.S. Department of Defense, 2020). Whether entering as an enlisted service member or as an officer with a college degree, all branches of the U.S. armed services have a basic training period for new recruits. During this pivotal transition period, recruits engage in rigorous physical and psychological training that transforms them from civilian to soldier (U.S. Army, 2020).

The decision to serve in the military is often one of the most life-changing decisions an individual can make as each recruit undergoes indoctrination into a new cultural context (Spiro et al., 2018). Explicit efforts are made during basic training to realign each recruit's values, beliefs, behaviors, language, and identity to military cultural norms. Atuel & Castro (2018) described military culture as “defining characteristics of the military as an organization with a formal structure, as a cultural group governed by norms, and as a social group that provides people with identities” (p. 76). The major domains of military culture include: (1) The concept of “mission first”, (2) a hierarchical chain of command, (3) teamwork and responsibility, and (4) systematic training and personal growth (Adler & Castro, 2013). Within this cultural context, the occupations of being a soldier include the demands of killing, avoiding being killed, caring for the wounded, witnessing death and injury, frequent relocation, separation from family, and 24/7 availability (Adler & Castro, 2013; Kirchen, 2013). All of these factors combine and interact to delineate military from civilian culture. Given the highly structured nature of military culture, this culture has an enduring effect on veterans' lives.

Marine Corps Culture. While the U.S. Armed Forces has an overall military culture, it is important to note that each branch of service has its own unique culture. Given the majority of older veterans who participated in this study served in the U.S. Marine Corps, it is important to discuss Marine Corps culture specifically. Despite being the military's smallest branch, the

Marine Corps has the biggest reputation and is often considered the most prestigious of the service branches (Goldich & Swift, 2014). To become a Marine, recruits must endure the longest and toughest basic training period in all of the armed services where they are taken “To the brink of exhaustion in ways that test their toughness PHYSICALLY, MENTALLY, and even ethically. To earn our title is to prove you belong alongside our Nation’s elite fighters.” (U.S. Marine Corps, 2020, emphasis in original). This indoctrination into an elite group has an enduring impact on those who serve in the Marines as illustrated by Lieutenant General Krulak (2014):

Among Marines there is a fierce loyalty to the Corps that persist long after the uniform is in mothballs... Woven through that sense of belonging, like a steel thread, is an elitist spirit. Marines are convinced that, being few in number, they are selective, better, and above all different (p. 9).

Johnson (2020) described specific traits that make the Marine Corps different. First, it is the only branch that is independent, but operates as part of another branch. The branch has been considered a “sister service” of the Department of the Navy since 1834 when Congress voted to make the Marines part of the Navy given their proven effectiveness on sea. Another trait central to the Marine Corps is their role as the first branch on the ground during crises. Marines often spearhead U.S. military operations and part of their branch’s unique culture is an expeditionary mindset. All Marines are trained first as rifleman, to be always combat ready, and physically and mentally able to respond to crises. Marines are the only service members that receive specialized training in martial arts that prepares them for hand to hand and close quarter combat.

This emphasis on being elite fighters is reflective of the Marine Corps’ lore, cultural values, beliefs, and traditions (Pollman, 2018). Many individuals choose to join the Marine Corps specifically because of this cultural reputation. For instance, Bhagwati (2019) described choosing the Marines because, “I wanted trials. I wanted to be tested. I wanted something extreme” (p. 38). Marines have a high reverence for their branch’s culture and there is an

emphasis on teaching new recruits Marine Corps history and lore as well as continually expanding on this knowledge in the professional education Marines receive throughout their careers (Pollman, 2018). As a result, this unique culture has an enduring effect on those who serve in the Marine Corps.

Occupation

The occupations of older veterans during their military service can have a lasting impact on their health and well-being as they age. In order to understand the long-term impact of military service on aging, it is important to understand how participation in military occupations is linked to health and well-being. For the purposes of this study, occupation is understood as synonymous with human doing (Wilcock, 1999). Wilcock (1999) described this view of occupation as broad with participation in occupation encompassing a synthesis of doing, being and becoming that directly impacts the health or illness of individuals. A fundamental belief then of occupational science is that humans are occupational beings with an innate need to participate in occupation (Yerxa et al., 1989; Wilcock, 1991). This view of human nature is significant, emphasizing an essential, evolutionary need to engage in occupation not only to survive, but to use our capacities to grow and flourish (Wilcock, 1993; Yerxa et al., 1989). Accordingly, participation in occupation is directly linked with health and well-being (Wilcock, 1999; Yerxa et al. 1989). Occupational participation is understood as having a significant impact on a person's well-being or their development of disease (Wilcock, 1999). For older adults, occupation has both a restorative (Jansen & von Sandovsky, 2004) and preventative (Jackson et al., 1998) impact on health, as well as a positive association with well-being and life satisfaction (Heatwole Shank & Cutchin, 2010; Law et al., 1998; Nilsson et al., 2007).

In older adulthood, occupation has also been linked to health and well-being as an expression of identity (Rowles & Ravdal, 2002; Laliberte-Rudman, 2002; Wright-St Clair, 2012). Christiansen (1999) described occupation as the mechanism through which people develop and refine their identities across the life course. Occupations can serve as a source for maintaining aspects of identity for older adults by connecting their past, present, and future. Explaining this process, Laliberte-Rudman (2002) found older adults manage their identities by prioritizing and focusing on occupations that provide a means to connect with their past and allow them to express who they are both to themselves and to others. Heatwole Shank & Cutchin (2010) similarly described how older adults aging in place found ways to negotiate and adapt their participation in order to sustain engagement in the daily occupations they saw as most central to their personal identity. For older veterans, participation in occupations in the military cultural context can have a lasting effect on their identity as “immersion in military culture can be such an indelible experience that veterans will identify with it more than any other cultural influence even decades after leaving active-duty service” (Meyer et al., 2016, p. 26). The loss of occupations during older adulthood can also result in the loss of the ability to enact and develop one’s identities. Occupations provide opportunities for constructing new identities considering transitions and declines.

Resilience

Resilience, the process of adapting well to adversity (American Psychological Association, 2019), has been identified as an important factor in understanding the long-term impact of military service on the health and well-being of veterans as they age (Pietzrak & Cook, 2013). Researchers have proposed that experiencing trauma and adversity in early adulthood may cultivate resilience in veterans and allow them to adapt well to significant changes and

losses that are common in older adulthood (Fogle, 2020). Within the aging literature, resilience is a concept that has received significant attention given its association with successful aging, improved health and well-being, and its potential to help people positively reframe their understandings of older adulthood (MacLeod et al., 2016; Zeng & Shen, 2010). Originally developed in psychology and physiology, resilience was first conceptualized as an inherent trait that some individuals were understood to have from birth (Tusaie & Dyer, 2004). The construct of resilience has undergone a conceptual revolution over the past two decades, with growing consensus across disciplines that resilience is not a trait, but a dynamic process of adaptation as individuals negotiate adversity over time (American Psychological Association, 2018; Bonnano, 2004; MacLeod et al., 2016). In the context of older adulthood, resilience is cumulative, gained through negotiation of adversities across the life course and in turn used to negotiate adversities associated with later life (Center for Policy on Ageing, 2014; MacLeod et al., 2016; Wild et al., 2013).

In addition to understanding resilience as a dynamic and situated process, scholars have also argued for the need to assess resilience both objectively and subjectively (Walsh, 2016; Wild et al., 2013). Wild et al. (2013) argued that researchers must ask older people themselves to define what resilience means to them to enhance the potential of resilience as a useful conceptual resource for understanding aging. Wild et al. called for more qualitative measures in research as “older people’s definitions tend to be more multi-dimensional, nuanced, contextualized, and attentive to balance and tension than more narrowly focused normative definitions often used by researchers” (p. 154). Walsh (2016) contended that mixed method approaches should be used to capture the “contextually contingent nature of the construct of resilience” (p. 628). Given the multi-dimensional nature of resilience, mixed-methods research that combines different data

collection approaches may be crucial to advancing our understandings of this dynamic and adaptive process.

Inquiry focused on understanding the intersection of aging and military service using mixed methods can begin to shed light on the process of resilience as an accumulation of adaptive experiences to adverse events across the life course. Aldwin et al. (1994) examined both positive and negative aspects of adversities experienced during time in military service for older U.S. military veterans. Participants reported the positive aspects of military service far outweighed the negative aspects despite their exposure to heavy combat. Participants described how military service fostered resilience such that “combat exposure inoculated some men against future stress” as “they felt that if they could cope with war, they could cope with anything” (p. 6). Pietrzak and Cook (2013) found high levels of resilience in a sample of older veterans, finding that 70% who experienced a high number of traumas throughout their lives were resilient in later life. Older U.S. military veterans who were considered resilient in this study also had higher positive ratings regarding their military service. Overall, these studies point to the need to know more about resilience in older U.S. military veterans as a unique cohort of the aging population and how resilience in this population could be a protective factor for aging well.

Within the OS/OT literature, scholarship focused on resilience is still in its infancy. While the relevance of the concept to occupational science and occupational therapy has been noted (Christiansen, 2007; Matuska, 2013) only a few studies have examined the relationship between occupation and resilience. Wright-Voss et al. (2018) found that for older adult retirees, they described themselves as resilient in the ways they adapted to the challenges for retirement. The authors found that through participation in occupations other than work participants adapted to being retired. Another study focused on resilience in the daily occupations of mothers of

children with autism spectrum disorder (Santoso et al., 2015). In this study, Santoso et al. (2015) found mothers demonstrated resilience in the ways they found solutions to everyday problems for their children and how they strove to balance daily occupations for their families. A final study focused on occupation and resilience examined the influence of occupational therapy intervention on resilience for individuals with multiple sclerosis (Falk-Kessler, 2012). Falk-Kessler (2012) found that for a group of individuals with multiple sclerosis, occupational therapy services contributed to a significantly improvement in resilience scores on the Resilience Scale post intervention compared to a group that did not receive OT services.

This small vein of scholarship demonstrates that across all practice settings, occupational therapists interact with clients and families who experience adverse events. Occupational therapy then, with its focus on participation and understanding of the transactional relationships between person, occupation and context, may be uniquely suited to enhance resilience. Occupational science in turn, may be uniquely suited to study the relationship between occupation and resilience. OS/OT has much to contribute to the scholarship on resilience by understanding how resilience is cultivated and sustained through engagement in occupation. There is a need then for more research to investigate the relationships between occupation and resilience to generate new knowledge to inform practice.

Successful Aging

Successful aging has also been identified as an important construct that contributes to understandings of the long-term impact of military service on veterans' health and well-being (Fogle et al., 2020; Pietzrak et al., 2014). Given the increasing number of veterans entering older adulthood, there is a need to understand how well they are aging and how military service may or may not contribute to aging well. Successful aging is a construct in the gerontology literature that

is defined as how well or successfully, in terms of health and well-being, an older adult is aging (Martinson & Berridge, 2015). Rowe and Kahn (1997) originally defined successful aging using objective criteria consisting of three main components: (a) low risk of disease and disease related disability, (b) high levels of physical and cognitive health, and (c) sustained engagement in social and productive activities. Another conceptualization of the construct measures successful aging as the selection of, and continued engagement in, activities that are important to an older adult (Baltes & Carstensen, 1996). The definition proposed by Rowe and Kahn has been highly critiqued for being too narrow, applying to only 5% of the older adult population, and failing to “capture the full experiences and contexts of aging” (Martinson & Berridge, 2015, p. 65). Over 100 variations in the conceptualization of successful aging have been proposed by aging scholars (Cosco et al., 2014; Rowe & Kahn, 2015). Despite the lack of consensus, authors have argued that the benefits of upholding the concept of successful aging outweigh doing away with it entirely (Pruchno, 2015; Stowe & Cooney, 2015; Rowe & Kahn, 2015). Scholars have argued for a more multidimensional definition combining elements from different conceptualizations (Pruchno, 2015). This study will employ Reker’s (2009) conceptualization which combines elements from four different models that have made significant contributions to this area of research: the psychological well-being model of Ryff (1989); the selection, optimization, and compensation model of Baltes and Baltes (1990); the primary/secondary control model of Schulz and Heckhausen (1996); and the disease/cognitive functioning/engagement model of Rowe and Kahn (1997). In addition to Recker’s (2009) conceptualization, successful aging will also be measured subjectively using life history interviews. It is important to measure successful aging in this study using both objective and subjective measures to account for the reality that many older

adults, including many older U.S. military veterans, live with chronic conditions and still consider themselves aging successfully (Martinson & Berridge, 2015).

In recent years, there has been an increasing focus on understanding successful aging in older U.S. military veterans. Pietrzak et al. (2014) showed that 82% of older U.S. military veterans rated themselves as aging successfully. In this study, successful aging was operationalized as a dichotomous variable (do you consider yourself to be aging successful: yes or no). Physical health difficulties, the number of medical conditions, difficulty performing instrumental activities of daily living, and depressive and PTSD symptoms were most strongly negatively associated with successful aging. A perceived positive effect of the military was found to be moderately correlated with successful aging. Drawing on the same data set, Rozanova et al. (2015) examined older veterans' perceptions of the determinants of successful aging and found that older U.S. military veterans identified self-reliance, participation in health promoting behaviors, and participation in social activities as key determinants to successful aging. The authors suggested that military training and culture had an influence on the older veterans' emphasis on self-reliance and health promoting behaviors. Together, these two studies constitute an important stepping-stone as they focus on positive long-term outcomes, and the potential of military service to serve as a protective factor for promoting the successful aging of older U.S. military veterans.

In conclusion, there is growing evidence that the effects of military service are life-long, encompass a heterogeneity of outcomes, and differ according to service and conflict era. Research is beginning to suggest that military service, resilience and participation in meaningful occupations may serve as protective factors for older U.S. military veterans that promote successful aging. At issue is that while resilience and occupational participation have been noted

separately as factors that influence successful aging, to date no studies have examined the relationship between resilience and occupational participation, and the impact of both on the successful aging of older veterans. Knowledge regarding the relationships between these constructs could inform interventions to enhance successful aging with this population. For example, possible peer support interventions that address decreased social participation, loneliness or isolation in later life. Furthermore, most studies have narrowly measured the aforementioned constructs, and few have included older veterans' qualitative appraisals of military service and its effect on their lives.

The aim of this study then is to better understand the relationships between military service, occupational participation, resilience, and successful aging using a mixed-methods approach. Given the increasing numbers of older veterans, there is an urgent need for a more comprehensive understanding of the myriad effects of military service to inform both policy and practice to promote veterans' successful aging. Findings from this study will contribute to understandings regarding the long-term impact of military service on older veterans as occupational beings. The project has the potential to impact future research on successful aging, increase understandings of military culture and older veterans within OS/OT, and may inform the development of occupational therapy interventions aimed at promoting the participation and successful aging of this population.

CHAPTER 3: GUIDING THEORETICAL PERSPECTIVES

The purpose of this chapter is to describe the theoretical perspectives that informed this study. I drew from three theoretical approaches, each with a different boundary of analysis that contributed varied insights regarding the relationships between military service, occupational participation, resilience and successful aging for older veterans. First, the transformative paradigm is introduced as it is the overarching framework for the study. I then discuss the life course perspective, and finally the transactional perspective.

Transformative Paradigm

The transformative paradigm is a theoretical framework that guides mixed-methods research focused on issues of justice to advance the needs of underrepresented or marginalized populations (Creswell & Plano Clark, 2011; Mertens, 2007). Mertens (2012) outlined four guiding assumptions of the transformative paradigm that inform research and methodological choices: (1) multiple realities and ways of knowing in the world that are socially constructed with some realities valued over others, (2) the relationship between the researcher and participants should be guided by cultural sensitivity and acknowledgement of power at all levels of the research process, (3) research and advocacy are not separate, the researcher has shared responsibility for advocacy, and (4) ethics in research: beneficence, trust, and justice should guide the research process such that ethics and issues of justice are always considered and discussed. The transformative paradigm recognizes that the “voices of those who are disenfranchised on the basis of gender, race/ethnicity, disability, or other characteristics” are often excluded in research (Mertens, 2007; 2012).

Scholars in aging have argued that older adults' involvement in research is often shallow as a result of normative assumptions about aging and have called for methods that "give voice" to older adults as the experts of their own life stories (Bornat, 2001; Ray, 2007). The transformative paradigm encourages the use of mixed methods to highlight issues of need with quantitative data and give voice to those issues with qualitative data. As a result, this study used an exploratory sequential explanatory approach that first gathered quantitative data via surveys to identify issues of need and then followed up with qualitative interviews to give voice to those issues. The transformative paradigm provided a useful framework for the study of older U.S. military veterans as a vulnerable and marginalized population. Through use of this framework, I sought to empower older veterans as active and engaged participants in the research process, acknowledging they are the experts of their own life stories, and provide a space for their stories to be told in the way they preferred through the use of specific methods.

Scholars in OS have argued for a more critical, reflexive, and socially responsive science of occupation (Hammell, 2009; Hocking & Whiteford, 2012). The transformative paradigm offers a useful avenue to study occupation through a critical perspective that focuses on examining assumptions regarding issues of power, justice, and cultural complexity from the outset (Mertens, 2007). Similar to Hocking's (2012) call for occupational scientists to adopt an activist stance in their research to uncover taken for granted truths about certain groups, the transformative paradigm challenges researchers to develop nuanced cultural sensitivity as a starting point for questioning widely held assumptions about groups of people. Hocking (2009) further noted that the ethics of studying occupation entails acknowledging and describing the diversity of participation and meaning that exists within any occupation. The transformative

paradigm offers many tools for enhancing justice work in occupational science as a socially responsive discipline.

For this study, the transformative paradigm served as an ethical umbrella framework. It was also the driver of the overall mixed methods design and design elements that promoted increased participation in the research process. Given that most research to date with older veterans has focused on the short-term and negative effects of military service, this study was concerned with drawing attention to the long-term positive effects of military service. Therefore, I sought an approach that would move beyond the focus on short-term and negative outcomes of military service, widespread reliance on solely quantitative measures, and Veterans Affairs based samples in previous studies of older veterans. The transformative paradigm provided a foundation for arguing that both quantitative and qualitative approaches needed to be applied in combination to the study of older veterans. The quantitative phase served to capture broader patterns while the qualitative phase gave voice to the older veterans.

The transformative paradigm also provided an overarching justice framework to house the variety of theoretical lens and methodological approaches used in this study (Mertens, 2009). Instead of viewing each theoretical perspective as separate from the others, having an overarching framework attuned me to the overlap and ways the theoretical perspectives could be layered to provide more nuanced understandings. In addition, guided by the assumptions of this framework, I was persistently attuned as the researcher to issues of power, justice, and cultural sensitivity. This encouraged constant reflexivity on my part throughout the entire research process. This took the form of a reflexive journal, educating myself further about the culture of the military, understanding how my own values shaped how the researched unfolded, and processing the emotions that arose with the context of interviews. This framework also drove a

key decision I made during the research process to oversample women veterans for the qualitative phase. The rationale for this decision was to give voice to the older women veterans given they are a subgroup of the older veteran population who, to date, are underrepresented in research. I describe this in more detail in a latter section on positionality.

The Life Course Perspective

The second theoretical perspective used in this study is the life course perspective. The life course perspective is an interdisciplinary theory originally developed by Glen Elder (1974) that focuses on understanding how sociocultural contexts shape human lives over time (Elder et al., 2015). Life events, transitions, and trajectories make up individual lives and are shaped by age-differentiated life stages (Elder, 1998). Each stage (e.g., childhood, adolescence, young adulthood, middle adulthood, and older adulthood) is characterized by different experiences, milestones, and roles within a given society (Hutchinson, 2011). This perspective provides a framework that attunes researchers to socio-cultural contexts and social institutions (e.g., the military and the historical contexts in which military service occurred) that play a significant role in shaping human lives.

Five major principles characterize the life course perspective and, for the purposes of this study, provide a foundation for understanding how military service shapes the life course (Elder, 1998; Elder et al., 2003; Elder et al., 2015). The first principle of *lifelong development* states that human development and aging must be understood as a process that unfolds over time. For older veterans each stage of life shapes subsequent stages, such that participation in occupations during military service shapes subsequent stages in life. Life experiences at each age and stage reverberate across the life course and shape later life. The second principle of *historical time and place*, states that the life course of individuals is embedded in and shaped by

the historical time and geographical places experienced throughout life. For veterans, the historical and social contexts that constituted the backdrop for each stage of their life, such as serving during the Vietnam Era, have a strong impact on their life experiences. The third principle, *timing in lives*, states that the developmental impact of a succession of life transitions or events is contingent on when they occur in a person's life trajectory. For example, entering the military at different ages in life, such as right out of high school versus later in adulthood, can have a profound impact on later-life outcomes. Principle four, *linked lives*, emphasizes that lives are lived interdependently, and social and historical influences are expressed through a network of shared relationships. Veterans forge bonds with other service members during their time in service and become nested within social networks that impact their life course trajectories. The fifth principle of *human agency* states that individuals construct their own life courses through the choices and actions they take within the opportunities and constraints of history. Veterans make choices and take actions such as using their Government Issue (G.I.) Bill benefits or signing up for another deployment, such that, even in the face of adverse circumstances, personal choice and adaptation can be exercised.

The life course perspective is a valuable approach to the study of aging U.S. military veterans because of its holistic view of aging. Compared to traditional views of aging that often focus on negative changes and progressive loss, the life course perspective considers the study of aging as synonymous with the study of human development (Elder & Johnson, 2002). Aging is viewed as a multidimensional, continuous, and lifelong process influenced by social and historical factors, as well as encompassing processes of growth and change that involve both losses and gains (Alwin, 2012; Crosnoe & Elder, 2002). This understanding of aging aligns with calls for a positive re-envisioning of the long-term impact of military service that situates

military service within an individual's life course and sociocultural context (Spiro et al., 2016). The perspective takes into account not only the negative effects, but also the positive effects of military service on veterans' health and well-being over time (Spiro et al., 2016; Wilmoth & London, 2018). The life course perspective is also valuable given its grounding in empirical evidence based on the impact of the sociohistorical context of World War II on individual lives. The theory was developed by Elder and colleagues based on cohort data sets that included World War II veterans and followed their development before, during, and after military service. Given this empirical grounding, Gade (1991) argued that the life course perspective should be used as the guiding theoretical lens for studies with military populations.

For this study, the life course perspective specifically contributed to the research process in three ways, it (1) enabled me to move between micro, meso, and macro perspectives, (2) attuned me to the influence of sociocultural contexts and timing, and (3) provided me with a language to describe the long-term impact of military service through the use of the five principles. This perspective challenged me to focus on the long-term effects of military service by considering multiple perspectives including at the individual level of each older veteran, demographic veteran group perspectives such as the women veterans in this study sample, as well as perspectives on the macro level like considering the unique experiences of Vietnam Era veterans which comprised the majority of my sample. This ability to zoom in and out between perspectives was valuable as I considered the influence of sociocultural context and timing in the lives of the veterans from this study. While some veterans were drafted for the Vietnam War, others served during the all-volunteer force (AVF) change in 1973. Some entered into the military right out of high school, while others served after college or later in adulthood. This attention to context, in combination with the life course perspective's theoretical nimbleness,

challenged me to account for how “military service varies across individuals’ characteristics, service experiences, historical periods, cohort membership, and timing of military service” (Wilmoth & London, 2013, p. 2). This aligned well with a mixed methods approach where qualitative data captured individual perspectives and quantitative data captured patterns and trends across the larger sample based on demographics and differences in military experience. Finally, the principles of the life course perspective provided me a language to describe the individual level processes and long-term outcomes of military service for the study sample. I especially used the language of the principles during the qualitative analysis process. During coding, I did not set out to specifically use the principles as codes, but because of my familiarity, I often found myself applying a principle to break down or label chunks of data. For example, I used *linked lives* to describe how most of the veterans had a father or immediate family member who had also served in the military. Given the way the principles interrelate, applying one prompted me to think about how the others applied and notice patterns I was seeing in the data.

The Transactional Perspective

The third theoretical approach used for this study was the transactional perspective. The transactional perspective of occupation was developed by Dickie et al. (2006) as a critique of occupational science’s individualized approach to the study of occupation. Similar to the life course perspective, Dickie et al. (2006) were also concerned with the under theorization of the role of context in understandings of occupation. As a result, the transactional perspective was posed to “recast thinking about occupation in a way that would overcome the limitations of overly dualistic, individualized (decontextualized), linear, and mechanistic theories” (Cutchin & Dickie, 2013, p. 3). Based on John Dewey’s theory of human action, the transactional perspective embraces a holistic and relational view of humans and the world arguing they are co-

constitutive and co-emerging. Occupation is described as the mode through which humans functionally coordinate with sociocultural environments (Cutchin & Dickie, 2012). The transactional perspective also attunes researchers to the fundamental role of habit. Dewey (1922) understood habits as more than automatic mechanical responses to environmental cues; instead, casting habits as the foundation for sensation, thought, and action (Kestenbaum, 1977). Social habits, which are shared among members of a given society, are the building blocks of occupation and individual occupational performance (Cutchin et al., 2008). While both the life course perspective and the transactional perspective provide researchers with a contextualized and relational view of human occupation, the transactional perspective gives researchers language precise to OS/OT and attunes researchers to the ways culture shapes habits as the building blocks of occupation that can be used to apply the principles of the life course perspective to understandings of occupation.

For the study of occupation as a complex phenomenon, the transactional perspective provides a robust framework and language with which to investigate and describe occupation. Occupation is understood as the “relational glue” between human and environment (Cutchin et al., 2008). Using this perspective, the level of inquiry and analysis moves beyond the individual to the situation. For this study, this perspective provided occupation-specific language and a broad lens through which the long-term impact of military service could be viewed. In combination with the life course perspective, the transactional perspective challenged me to account for more than just individual level factors as well as *how* participation in military occupations can be viewed as occurring through constant coordination of environment and person. Additionally, by focusing on habits as the building blocks of occupation, I was able to describe *how* military occupations have an enduring impact on veterans.

As a cultural context, the military itself is highly regimented with distinct habitual and routinized ways of doing. Military culture is engrained then through occupation as service members develop habits and ways of doing such as making their bed for inspection, staying physically fit, developing leadership skills, and cultivating a high level of being able to adapt and overcome tough situations. There is insufficient research in the OS/OT literature studying connections between the military context and occupation (Kirchen & Hersch, 2015). The military context has been described as a total social institution (Wilmoth & London, 2013), with the culture of the military (i.e., language, values, and beliefs) having an enduring influence on the lives of older veterans. The transactional perspective offered a valuable lens to understand the occupations of older U.S. military veterans as socially funded, habitual, and relational.

CHAPTER 4: OVERALL SEQUENTIAL MIXED METHODS DESIGN

The purpose of this chapter is to present an overview of the methodological approach used in this study. First, I discuss my justification for choosing a mixed methods approach. Next, I describe the overall design of this study. Then, I describe the recruitment procedures for the study. Further details regarding the procedures for each phase of the study are described in subsequent chapters focused on the two unique phases (i.e., quantitative and qualitative) of the study.

Mixed Methods

To answer the research questions, this study utilized a sequential explanatory mixed methods design. A sequential explanatory design entails collecting and analyzing quantitative and then qualitative data in two consecutive phases within one study (Ivanakova et al., 2006). This combination of both quantitative and qualitative methods is the hallmark of mixed methods research where different approaches are combined to gain increased depth and breadth for understanding complex social phenomena (Johnson, Onwuegbuzie, & Turner, 2007). In the social sciences there is an increasing trend of using mixed methods research (Creswell & Plano Clark, 2011; Happ, 2009, Bryman, 2006). Mixed methods have been argued as more reflective of the ways in which we take in data and process it in our everyday lives which makes it an intuitive research approach for the social sciences (Creswell & Plano Clark, 2011). Overall, scholars have pointed to the need for mixed methods research to address larger issues facing society than one method alone cannot provide (Liebner & Weisner, 2010). Mixed methods research has been viewed as a fruitful avenue forward for the social sciences as a way to move

beyond methodological tribalism and the false dualism between quantitative and qualitative approaches (Heatwole Shank, 2013; Lamont & Swidler, 2014).

Based on the philosophical assumptions of Pragmatism, mixed methods research emphasizes an understanding of multiple forms of inquiry and ways of knowing the world (Heatwole Shank, 2013). Mixed methods researchers take the position that the worldviews that guide research are not dualistic or fixed, but instead can be combined in a mixed methods study (Creswell & Tashakkori, 2007). For example, in a sequential explanatory mixed methods design, a quantitative survey (embracing a postpositivist perspective) is first used to collect numerical data and then qualitative interviews (embracing a constructivist perspective) are used to collect textual data. It is acknowledged that these two forms of inquiry embrace different epistemological perspectives, but they are not seen as at odds with one another. Instead, mixed methods research acknowledges the tensions that exist and finds value in comparing and contrasting the findings that emerge from multiple worldviews (Greene, 2006). Within a mixed methods design the researcher has both quantitative and qualitative data sets from which to draw inferences and then can compare and contrast the results from each of these data sets in an integrated way to draw broader inferences about the research topic. Triangulation across the data sets provides a more holistic picture of social phenomena than could be achieved using only one method (Liebner & Weisner, 2010).

Within occupational science mixed methods research holds great potential as a research approach that can be used to study occupation as a complex social phenomenon. Scholars have pointed out the majority of research in the discipline is qualitative in nature and have called for researchers to broaden their approaches in order to capture the complexity of occupation (Clark, 2006; Wright St. Clair, 2012; Heatwole Shank, 2013). Heatwole Shank (2013) noted that given

its philosophical grounding in Pragmatism, mixed methods is advantageous in merging different modes of inquiry to gain a fuller and more holistic understanding of occupation. She described the use of different methods as camera lens that could each bring a different dimension of occupation into focus and when combined resulted in a deeper and more holistic understanding. Rudman & Huot (2015) likewise noted the importance of layering methods in order to capture the tacit nature of occupation. A mixed methods approach provides the occupational scientist with more than one lens to view occupation and the ability to triangulate across data sets to pick up on nuances of occupational participation than one method alone could provide.

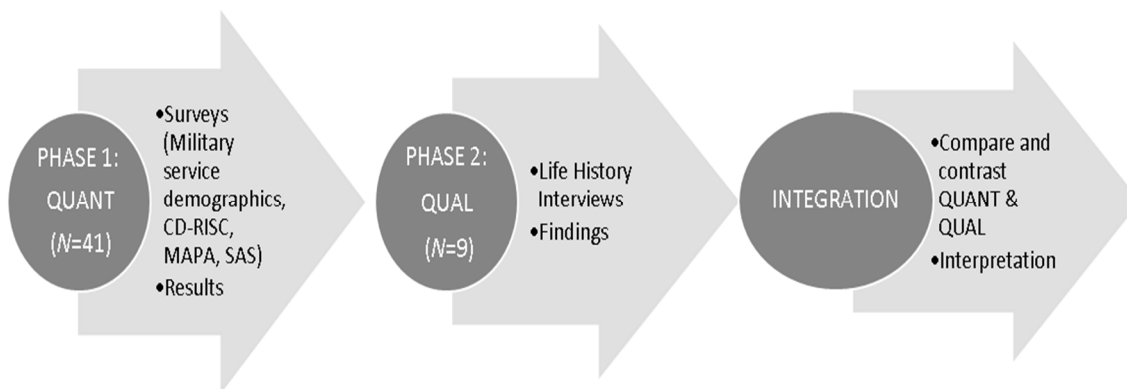
Mixed methods research is also advantageous for occupational science given its focus on situated inquiry, the idea that problematic situations in the world should drive research questions of relevance for society (Heatwole Shank, 2013). This is of particular interest for occupational science as the discipline strives to be more socially responsive. By bringing multiple viewpoints to bear on a complex situation, findings from mixed methods research can be used by researchers to challenge assumptions about a population and to contest dominant taken for granted understandings (Wardale et al., 2015; Mertens, 2007). Mertens (2009) argued that mixed methods research challenges researchers to be reflexive about their own positioning and assumptions and to develop culturally sensitivity as a key skill. Given that existing understandings of occupation have been critiqued as developed by researchers with a predominantly Western, middle class, and able perspectives this cultural sensitivity bringing in multiple viewpoints is both timely and important (Hammell, 2009; Hocking, 2012). Using a mixed methods approach to the study of occupation could provide more culturally sensitive understandings of the diversity of ways people engage in the doings of everyday life.

Sequential Explanatory Design

To answer the study's research questions, a sequential explanatory mixed-methods design was used to provide a robust understanding of the relationships between military service, occupational participation, resilience and successful aging for older U.S. military veterans (see Figure 1).

Figure 1

Sequential Explanatory



This depth of understanding could not be achieved when using solely quantitative or qualitative methods. A sequential explanatory design consists of two distinct phases, a quantitative phase followed by a qualitative phase (Creswell & Plano Clark, 2011). In this design, quantitative data is collected and analyzed in the first phase with the results informing a follow-up qualitative phase. The quantitative and qualitative phases are related to one another with the qualitative building upon the quantitative. Both phases focus on the study constructs of interest with the intent of the qualitative phase to help explain and elaborate results from the quantitative phase.

The rationale for this design is that the quantitative data and their subsequent analyses provide a more general understanding of phenomena while the qualitative data and their analyses

refine and explain the phenomena in greater depth (Ivankova et al., 2006). In other words, results from the quantitative phase identify broad patterns across a group and then the qualitative phase goes more in depth in an attempt to explain those patterns. For this study, the first quantitative phase (see Ch. 5 for further detail on quantitative phase) consisted of survey data collection from 41 participants to examine the relationships between military service, occupational participation and resilience affect the successful aging of older veterans. The survey consisted of three measures assessing occupational participation using the Meaningful Activity Participation Assessment (MAPA), resilience using the Connor Davidson Resilience Scale shortened (CD-RISC 10), successful aging using the Successful Aging Scale (SAS), as well as general and military specific demographic information using the Items for Assessing Military Service Scale. For phase 2 (see Chapter 6 for further detail on qualitative phase), a small cohort of 9 participants from phase 1 was selected based on scores of overall successful aging and stratified according to high, average, and low ends of successful aging based on standard deviations of the sample distribution. The cohort from phase 2 participated in life-history interviews to explore in-depth older veterans' perceptions regarding their military experience and how it affected their life-course and successful aging. The quantitative data and their subsequent analyses helped identify relationships between the main study constructs while the qualitative data and their analyses were used to help explain these relationships more in depth (see Table 1).

Table 1*Description of Mixed-Methods Measurement Study Constructs*

Construct	Qualitative	Quantitative
Military Service	Measure Life-History Calendar Interview	Measure Military Service Scale
Resilience	Life-History Calendar Interview	Connor David Resilience Scale (CD-RSIC10)
Occupational Participation	Life-History Calendar Interview	Meaningful Activity Participation Assessment (MAPA)
Successful Aging	Life-History Calendar Interview	Successful Aging Scale (SAS)

Recruitment

All study procedures were approved by the University of North Carolina at Chapel Hill Institutional Review Board (IRB). After approval from the IRB, I began recruiting for the study by networking with existing U.S. Marine Corps veteran contacts in Onslow County, North Carolina. These contacts are close friends of my immediate family. Recruitment via convenience sampling targeted Onslow County, North Carolina, given it is the county with the highest percent of veterans (21.7%) in North Carolina (Tippett, 2015). I networked with existing contacts with veterans' service organizations such as The Veterans of Foreign Wars (VFW), The Montford Point Marine Association, and the United Service Organization (USO) for recruitment. These existing contacts acted as gatekeepers to different communities of older U.S. military veterans in Onslow County, assisted in identifying participants, and served as cultural interpreters for their organization and community. The gatekeepers informed me about each service organizations mission, chapter meetings, and which members in the group would be the most willing to participate and recommend the study to others. The gatekeepers vouched for me as a researcher to their respective groups. Based on recommendations from gatekeepers regarding recruitment, I attended different organization meetings and events such as the VFW's monthly meeting, and the

USO's older veterans weekly breakfast meeting to speak with veterans about the study and hand out flyers. Gatekeepers also forwarded my study and contact information to community group email list-servs. Along with key gatekeepers sharing information about the study via online resources and list-servs, snowball sampling also utilized the social networks of participants who were already enrolled in the study.

Inclusion/Exclusion Criteria

The following inclusion criteria was used for both the quantitative and qualitative phases of the study. Participant inclusion criteria were as follows: (a) self-reported as a U.S. military veteran living in the South Eastern United States, (b) aged 65 and above, (c) speaks English. Exclusion criteria included severe cognitive, auditory and language impairments that affect the level of functioning needed to participate in the study. Self-report and researcher screening of participants during an initial telephone conversation were used to identify whether participants had severe impairments that would prevent their full participation in the study (e.g., inability to communicate through verbal conversation and difficulty following more than one-step directions).

Impact of COVID-19

Recruitment efforts were made to increase diversity in the study sample. Given the majority of research on older veterans to date has focused on white male perspectives, it was important for me to recruit more minority veterans for this study so their perspectives were also represented. I specifically reached out to minority veterans' organizations in Onslow County including local chapters of The National Association of Black Veterans, The Montford Point Marine Association, and Women Marines Association. After three months of trying to arrange in-person meetings with gatekeepers from African American veteran organizations I finally

scheduled two meetings at the end of February and early March 2020. Unfortunately, both of these meetings were canceled by the gatekeepers due to growing safety concerns about the COVID-19 pandemic. Further, in response to the pandemic, UNC's IRB suspended all in-person interaction with research participants from the first week of March 2020 until early June. As a result, during the summer I was unable to reconnect with those gatekeepers from African American veteran organizations. The pandemic stunted efforts to recruit a diverse sample and this resulted in a study sample that was predominantly white and male. It also resulted in a sample that mainly represented one branch of the military with the majority of participants having served in the Marine Corps. Despite this imbalance in recruitment, I was successful in recruiting ten women veterans for the study.

Screening and Consent

I first contacted older U.S. military veterans interested in the study and screened them via an initial phone or email conversation to confirm they fit the inclusion criteria. This initial screening also provided the older U.S. military veterans with an opportunity to ask questions and receive clarification regarding study procedures. Older U.S. military veterans were informed that agreeing to participate in the study involved both participation in the quantitative phase and then possible selection for the follow-up qualitative phase. Based on the initial screening, those who met the inclusion criteria were enrolled in the study and informed consent was obtained. Participants were informed that they could choose to withdraw at any time during the study.

CHAPTER 5: MEASURING THE RELATIONSHIPS BETWEEN MILITARY SERVICE, OCCUPATIONAL PARTICIPATION, RESILIENCE, AND SUCCESSFUL AGING

The purpose of this chapter is to describe the quantitative phase of this study. I first detail the quantitative procedures and then my process of data analysis. I then describe the results of the quantitative analysis and finally discuss how these results fit within and expand upon the existing literature.

Phase 1: Quantitative Procedures

For the first quantitative phase, a cross-sectional survey design was used (see Appendix A). Data were collected from September 2019 to May 2020 from 41 participants. The survey consisted of three measures assessing occupational participation, resilience, and successful aging, as well as general and military specific demographic information. Participants were given the choice of completing the survey using the web-based format Qualtrics or by filling out a hard copy of the survey. All participants chose to complete the survey online using Qualtrics. Participants reviewed and electronically signed an informed consent form via Qualtrics before completing the survey.

Measures

Occupational participation was measured using the Meaningful Activity Participation Assessment (MAPA) (Eakman et al., 2010). The MAPA is an assessment designed to “measure the degree of meaning that individuals’ experience through participation in their activities” (Eakman et al., 2010, p. 299). It was developed specifically for use with older adults to capture both the objective and subjective aspects of activity participation and has been demonstrated as

both reliable and valid with the older adult population (Eakman, 2007; Eakman et al., 2010). The MAPA has two-week test-retest reliability with a Cronbach's alpha coefficient of 0.84 ($p < 0.1$), and adequate construct validity was supported as the scale demonstrated statistically significant meaningful relationships with criterion-related variables with a Cronbach's alpha coefficient of 0.85 ($p < 0.1$) (Eakman, 2007; Eakman et al., 2010).

The MAPA assesses meaningful activity participation via a 28-item checklist-type survey tool consisting of 28 diverse activity items. The activity items included on the MAPA were derived from focus group discussions with older adults about their daily activities (Eakman, 2007). The 28 MAPA activity items include: home making/ home maintenance, personal finances, driving, using public transportation, medical visits, socializing, writing letters/cards, helping others, gardening, physical exercise, crafts/hobbies, cultural activities, musical activities, taking courses, creative activities, traveling, talking on the telephone, reading magazines/newspapers, other reading, playing games, radio/TV, religious activities, prayer/meditation, community organization activities, volunteer activities, pet care activities, computer use for e-mail, other computer use. The activity items are not grouped in any way on the assessment, but instead are considered common activity items for older American adults.

In contrast to other measures of activity participation which typically only consider the average value for meaningfulness or frequency, the MAPA accounts for the association between meaning and frequency inherent in an individual's repertoire of daily activities (Eakman, 2007). With the MAPA, frequency of participation is measured by asking participants: "Please rate the amount of time that you spent on the following activities during the last few months." For each activity, the MAPA includes the following response options: 0 (Not at all), 1 (less than once a month), 2 (once a month), 3 (2 to 3 times a month), 4 (once a week), 5 (several times a week), or

6 (every day). Personal meaningfulness is measured by asking participants: “Please rate each activity according to how meaningful it is to you. That is, how much it matters or is personally fulfilling for you” using the following scale: 0 (not at all meaningful), 1 (somewhat meaningful), 2 (moderately meaningful), 3 (very meaningful), and 4 (extremely meaningful). The frequency of participation and the degree of ascribed meaning are combined multiplicatively to reflect an individual’s overall level of meaningful occupational participation. Score ranges for the MAPA are 0-672, with higher scores reflective of greater perceived meaningful activity participation.

Resilience was measured using the Connor Davidson Resilience Scale shortened 10-item version (CD-RISC10) (Campbell-Sills & Stein, 2007). This scale was chosen because it is a brief measure of resilience that has been validated with older adults. The scale includes items that reflect a person’s ability to tolerate experiences such as change, personal problems, illness, pressure, failure, and painful feelings. Endorsement of these items reflects a person’s level of perceived resilience, their ability to bounce back from the variety of challenges that can arise in life. A systematic review of scales used to measure resilience in later life (Cosco et al., 2016) concluded the CD-RISC10 was the best scale to use with older adults given it demonstrated acceptable levels of internal consistency with a Cronbach’s alpha coefficient of 0.93.

Successful aging was measured using the Successful Aging Scale (SAS) (Recker, 2009). To date there is no agreed upon gold standard measurement for successful aging. The latter has predominantly been measured as a dichotomous variable (successful aging vs. unsuccessful aging). Dichotomizing successful aging shows no nuance regarding the spectrum of potential outcomes for aging well and may include those who are actually at-risk for unsuccessful aging. More attention to a broader picture of successful aging is needed to identify the ways older adults negotiate adversities in later life and age well despite living with chronic conditions and health

impairments. Dichotomizing successful aging risks categorizing those aging with chronic conditions and health impairments as not aging successfully which fails to capture the full picture of how older adults negotiate and adapt to challenging situations in their everyday lives. A more nuanced measurement of successful aging is needed to inform prevention and intervention to identify and promote successful aging. The SAS was developed as a more comprehensive measure of successful aging with Cronbach's alpha coefficients of 0.84 for internal consistency and 0.71 for test-retest reliability with older adults (Recker, 2009). The SAS is a 14-item scale that assesses how people feel about their individual aging. Participants are asked to respond to items using a 7-point Likert scale.

Items on the SAS were developed based on four well-known models of successful aging: the psychological well-being model of Ryff (1989), the selection, optimization, and compensation model of Baltes and Baltes (1990), the primary/secondary control model of Schulz and Heckhausen (1996), and the disease/cognitive and functioning/engagement model of Rowe and Kahn (1997). Demographic data were collected as well as military-specific demographic information using the Items for Assessing Military Service Scale (Spiro II et al., 2016). This 19-item scale assesses military demographics (e.g., service in active duty, years of service, branch/era of service, rank when discharged), exposure (e.g., service in combat/war zone, how often participants felt in danger) and use of VA services (e.g., service-connected disability, enrollment/use of VA healthcare, use of education/home loan benefits).

Quantitative Analysis

Data were analyzed using IBM SPSS statistics Version 29 (IBM Corporation). Survey data was imported from Qualtrics into a Microsoft Excel (2019) database. These data were stored in a password-protected and secure server consistent with the security, privacy, and

confidentiality policies of The University of North Carolina's IRB. Outlying or missing data were compared to the original online instruments and discrepancies in the database were noted. A multiple imputation strategy as described by Graham (2012) was used with SPSS to handle the missing data. For each of the measurements, no more than 5% of the items were found to be missing; mean interpersonal scale values were imputed for those missing items. The aim of this quantitative phase was to measure the relationships between military service, occupational participation, resilience and successful aging for a sample of older U.S. military veterans. To address this aim, descriptive statistics were first calculated to summarize the demographic data, military specific demographics, and scores on the MAPA, CD-RISC, and SAS. To measure the relationships between the main study variables, Pearson's r correlations were used to investigate the level of association between occupational participation, resilience, and successful aging. Finally, regression analyses and independent sample t-tests were used to further examine these associations. Regression analyses examined the association of occupational participation and resilience as independent variables on successful aging as the dependent variable.

A regression analysis was also completed to examine the association of occupational participation as an independent variable on resilience as a dependent variable. To determine if there were any significant differences in occupational participation, resilience, and successful aging between demographic groups in the sample (e.g., gender, income, branch of service, etc.), independent sample t-tests were performed. The choice to use independent sample t-tests was made after consultation with a statistician from the Odum Institute at UNC-Chapel Hill. T-tests were recommended due to small sample size and small demographic group sizes. Demographic groups were collapsed into two group variables as this was deemed the most appropriate prior to conducting the t-tests. For example, for "branch of service" the sample was collapsed into two

groups, either Marine Corps or other, given the majority of the sample served in the Marine Corps.

Quantitative Results

Demographics

The large majority of participants were male ($n = 31, 75.6\%$), Caucasian ($n = 37, 90.2\%$), married ($n = 31, 75.6\%$), educated past high school ($n = 41, 82.9\%$), and retired ($n = 30, 73.1\%$). The mean age of participants was 73.2 years with a range of 65 to 89 years. Regarding their military service, the majority served in the Marine Corps ($n = 33, 80.4\%$), were on active duty during the Vietnam Era ($n = 33, 80.4\%$), and served in combat ($n = 28, 68.3\%$). The average length of military service was 17.12 years with a range of 1 to 40 years (see Table 2 for detailed description of participants demographics).

Table 2

Participant Demographics (N=41)

Characteristic	Average (range) or n	Percentage %
Age	73.2 (65-89)	
Gender		
Female	10	24.3
Male	31	75.6
Ethnicity		
Caucasian	37	90.4
African American	1	2.4
Middle Eastern	1	2.4
Latino	1	2.4
Mixed Race	1	2.4
Marital Status		
Married/Partner	31	75.6
Single	3	7.3
Divorced	7	17.1
Education		
High School/Some College	7	17.1
Associates	2	4.8
Bachelor's	14	34.2
Masters	15	36.6

Characteristic	Average (range) or <i>n</i>	Percentage %
Professional/Doctorate	3	7.3
Employment		
Retired	30	73.3
Part-Time/Self-Employed	8	19.5
Full-Time	2	4.8
Unemployed	1	2.4
Income		
\$35K or less	5	12.1
\$50-75K	12	29.3
\$75-100K	12	29.3
Over 100K	12	29.3
Living Situation		
With Spouse/Partner	30	73.2
Alone	5	12.1
Immediate Family	6	14.6
Years of service	17.12 (1-40)	
Branch of service		
Marine Corps	33	80.5
Navy	4	9.8
Army	3	7.3
Air Force	1	2.4
Active-Duty Service Era		
Sept. 2001 or later	3	7.3
Aug. 1990-Aug. 2001 (Persian Gulf War)	11	26.8
May 1975-July 1990	18	43.9
Vietnam era (Aug. 1964-April 1975)	33	80.5
February 1955-July 1964	9	21.9
Korean War (July 1950-Jan. 1955)	4	9.8
Combat/War Zone Deployment		
Persian Gulf War	9	21.9
OEF/OPI	3	7.3
Vietnam War	21	51.2
Korean War	2	4.8
Military Personnel Status		
Enlisted service member	13	31.7
Commissioned officer	13	31.7
Warrant officer	1	2.4
Noncommissioned officer	14	34.1
Used VA Healthcare		
Yes	26	63.4
No	15	39.6
Used VA Benefit		
Yes	31	75.6
No	10	24.4
VA Service-Connected Disability		
Yes	23	56.1
No	18	43.9

Characteristic	Average (range) or <i>n</i>	Percentage %
Impact of Military on Life		
Extremely Positive	34	83.0
Moderately Positive	6	14.3
Slightly Positive	5	12.2
Extremely Negative	1	2.5

Descriptive Statistics of Main Study Variables

MAPA. The mean overall MAPA score was 449.8 (SD 101.4) with a range of 256 to 624. Descriptive statistics were generated to determine the level of participation across the sample (N=41) (see Table 3). Using public transportation was the activity with the lowest participation rate averaging 0.1 ± 0.3 meaning the sample performed this activity less than once a month. On the high end, computer use for email was the activity the sample participated the most in with the highest activity participation rate of 5.7 ± 1.0 suggesting the sample on average participated in this activity every day. Using public transportation was followed by Taking courses (0.6 ± 0.9), Musical activities (1.4 ± 1.9), Traveling (1.6 ± 0.9), and Medical visits as the least common activities the sample participated in. Whereas, after Computer use for email, Radio/TV (5.4 ± 1.4), Other computer use (5.3 ± 1.1), Driving (5.1 ± 1.5), and Talking on the phone (5.0 ± 1.1) were the most common activities.

Table 3*MAPA-Activity Participation by Type of Activity (N=41)*

Activity Type	Mean (SD)*	Percent of Participation						
		Not at all	Less than once a month	Once a month	2-3 times a month	Once a week	Several times a week	Every day
Computer use for email	5.7(1.0)	1(2.4)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	6(14.6)	34(82.9)
Radio/TV	5.4(1.4)	2(4.8)	0(0.0)	0(0.0)	2(4.8)	0(0.0)	6(14.6)	31(75.6)
Other computer use	5.3(1.1)	1(2.4)	0(0.0)	0(0.0)	0(0.0)	2(4.8)	16(39.0)	21(51.2)
Driving	5.1(1.5)	2(4.8)	1(2.4)	0(0.0)	1(2.4)	1(2.4)	14(34.1)	22(53.7)
Talking on the phone	5.0(1.1)	0(0.0)	1(2.4)	1(2.4)	2(4.8)	3(7.3)	19(46.3)	15(36.6)
Other reading	4.5(1.7)	0(0.0)	3(7.3)	3(7.3)	8(19.5)	3(7.3)	4(9.6)	20(48.8)
Reading magazines/newspapers	4.4(2.2)	6(14.6)	1(2.4)	1(2.4)	3(7.3)	3(7.3)	5(12.2)	33(80.5)
Physical exercise	4.4(1.8)	3(7.3)	1(2.4)	1(2.4)	2(4.8)	0(0.0)	27(65.6)	6(14.6)
Home making/home maintenance	4.3(1.7)	3(7.3)	1(2.4)	2(4.8)	4(9.6)	4(9.6)	17(36.6)	2(4.8)
Personal finances	4.2(1.6)	1(2.4)	1(2.4)	4(9.6)	7(17.1)	7(17.1)	2(4.8)	11(26.8)
Prayer/meditation	4.2(2.2)	6(14.6)	3(7.3)	0(0.0)	1(2.4)	4(9.6)	10(24.4)	17(41.5)
Socializing	4.2(1.3)	0(0.0)	2(4.8)	3(7.3)	6(14.6)	9(21.9)	16(39.0)	5(12.2)
Crafts/hobbies	4.0(1.8)	3(7.3)	1(2.4)	2(4.8)	6(14.6)	4(9.6)	17(36.6)	6(14.6)
Helping others	4.0(1.4)	2(4.8)	0(0.0)	3(7.3)	12(29.2)	8(19.5)	11(26.8)	6(14.6)
Pet care activities	3.1(3.0)	19(46.3)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	2(4.8)	20(48.7)
Volunteer activities	2.7(1.9)	9(21.9)	4(9.6)	6(14.6)	5(12.2)	5(12.2)	11(26.8)	1(2.4)
Playing games	2.6(2.3)	12(29.2)	4(9.6)	6(14.6)	2(4.8)	3(7.3)	10(24.4)	3(7.3)

	Percent of Participation							
Gardening	2.5(2.1)	12(29.2)	4(9.6)	4(9.6)	5(12.2)	6(14.6)	5(12.2)	4(9.6)
Religious activities	2.5(2.0)	11(26.8)	6(14.6)	1(2.4)	4(9.6)	12(29.2)	6(14.6)	2(4.8)
Comm. organization activities	2.4(2.0)	12(29.2)	4(9.6)	3(7.3)	1(2.4)	6(14.6)	10(24.4)	0(0.0)
Cultural activities	2.3(1.9)	8(19.5)	12(29.2)	3(7.3)	6(14.6)	2(4.8)	7(17.1)	2(4.8)
Creative activities	2.2(2.1)	12(29.2)	8(19.5)	3(7.3)	4(9.6)	1(2.4)	9(21.9)	2(4.8)
Writing letters/cards	2.1(1.9)	2(4.8)	10(24.4)	7(17.1)	5(12.2)	2(4.8)	5(12.2)	2(4.8)
Medical visits	1.6(0.9)	0(0.0)	21(51.2)	10(24.4)	9(21.9)	1(2.4)	0(0.0)	0(0.0)
Traveling	1.6(0.9)	4(9.6)	17(36.6)	12(29.2)	7(17.1)	0(0.0)	0(0.0)	0(0.0)
Musical activities	1.4(1.9)	20(48.7)	9(21.9)	5(12.2)	0(0.0)	1(2.4)	3(7.3)	3(7.3)
Taking courses	0.6(0.9)	26(63.4)	10(24.4)	2(4.8)	0(0.0)	2(4.8)	0(0.0)	0(0.0)
Using public transportation	0.1(0.3)	37(90.2)	3(7.3)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)

Note. MAPA-Frequency scaling: 0: Not at all; 1: Less than once a month; 2: Once a month; 3: 2–3 times a month; 4: Once a week; 5: Several times a week; 6: Every day

Of the activities they participated in, Medical visits (4.0 ± 0.9), Computer use for email (4.0 ± 1.0), Driving (3.9 ± 1.0), Other reading (3.9 ± 1.1), and Helping others (3.9 ± 1.0) were rated the most meaningful. Using public transportation (1.3 ± 0.6), Taking courses (1.8 ± 1.0), Musical activities (2.2 ± 1.4), Playing games (2.5 ± 1.3), and Cultural activities (2.5 ± 1.2) were rated least meaningful (see Table 4).

Table 4*MAPA-Activity Participation Meaning by Type of Activity (N=41)*

Activity Type	Mean (SD)*	Meaningfulness of Participation				
		Not at all meaningful	Somewhat meaningful	Moderately meaningful	Very meaningful	Extremely meaningful
Medical visits	4.0(0.9)	0(0.0)	3(7.3)	7(17.1)	16(39.0)	15(36.5)
Computer use for email	4.0(1.0)	1(2.4)	2(4.8)	9(21.9)	11(26.8)	18(43.9)
Driving	3.9(1.0)	2(4.8)	1(2.4)	6(14.6)	19(46.3)	13(31.7)
Other reading	3.9(1.1)	1(2.4)	4(9.6)	7(17.1)	15(36.5)	14(34.1)
Helping others	3.9(0.9)	1(2.4)	3(7.3)	6(14.6)	19(46.3)	12(29.2)
Volunteer activities	3.8(1.0)	1(2.4)	3(7.3)	13(31.7)	12(29.2)	12(29.2)
Physical exercise	3.8(1.1)	2(4.8)	5(12.2)	3(7.3)	19(46.3)	12(29.2)
Personal finances	3.8(1.0)	1(2.4)	5(12.2)	7(17.1)	14(34.1)	14(34.1)
Other computer use	3.7(1.2)	6(14.6)	4(9.6)	4(9.6)	10(24.4)	17(41.5)
Socializing	3.6(1.2)	2(4.8)	6(14.6)	9(21.9)	12(29.2)	12(29.2)
Prayer/meditation	3.6(1.2)	4(9.6)	2(4.8)	11(26.8)	13(31.7)	11(26.8)
Radio/TV	3.5(1.6)	3(7.3)	3(7.3)	11(26.8)	19(46.3)	5(12.2)
Home making/home maintenance	3.4(1.1)	2(4.8)	5(12.2)	17(41.5)	9(21.9)	8(19.5)
Crafts/hobbies	3.4(1.1)	3(7.3)	5(12.2)	11(26.8)	17(41.5)	5(12.2)

	Meaningfulness of Participation					
Reading magazines/newspapers	3.4(1.3)	6(14.6)	4(9.6)	9(21.9)	13(31.7)	9(21.9)
Religious activities	3.3(1.6)	9(21.9)	6(14.6)	3(7.3)	9(21.9)	13(31.7)
Traveling	3.2(1.1)	4(9.6)	5(12.2)	12(29.2)	15(36.5)	4(9.6)
Talking on the phone	3.2(1.3)	4(9.6)	9(21.9)	8(19.5)	15(36.5)	5(12.2)
Comm. Organization activities	3.1(1.4)	7(17.1)	10(24.4)	5(12.2)	10(24.4)	9(21.9)
Pet care activities	3.0(1.7)	15(36.5)	3(7.3)	2(4.8)	9(21.9)	12(29.2)
Creative activities	2.6(1.3)	10(24.4)	6(14.6)	12(29.2)	6(14.6)	5(12.2)
Gardening	2.6(1.3)	11(26.8)	10(24.4)	9(21.9)	7(17.1)	4(9.6)
Playing games	2.5(1.3)	14(34.1)	8(19.5)	7(17.1)	10(24.4)	2(4.8)
Cultural activities	2.5(1.2)	10(24.4)	10(24.4)	13(31.7)	6(14.6)	2(4.8)
Writing letters/cards	2.5(1.2)	9(21.9)	14(34.1)	9(21.9)	7(17.1)	2(4.8)
Musical activities	2.2(1.4)	19(46.3)	7(17.1)	8(19.5)	3(7.3)	4(9.6)
Taking courses	1.8(1.0)	18(43.9)	17(41.5)	3(7.3)	1(2.4)	2(4.8)
Using public transportation	1.3(0.6)	31(75.6)	5(12.2)	1(2.4)	1(2.4)	0(0.0)

Note: MAPA-Meaningfulness scaling: 1: Not at all meaningful; 2: Somewhat meaningful; 3: Moderately meaningful; 4: Very meaningful; 5: Extremely meaningful

CD-RISC10. The participants' mean resilience score was 33.4 ± 5.2 . Scores ranged from a minimum of 19 to a maximum of 40. The mode and the median of the sample was 35.

SAS. The participants' mean score of successful aging was 46.2 ± 7.5 . Scores ranged from a minimum of 33 to a maximum of 86. The mode of the scores was 48 and the median 44.

Relationships Between Occupational Participation, Resilience, and Successful Aging

Pearson product-moment correlations revealed that no significant relationships were found between occupational participation and successful aging or between resilience and successful aging ($r = 0.15$, $r = 0.01$, respectively, $p < .05$). Occupational participation demonstrated a significant positive correlation with resilience ($r = 0.60$, $p < .01$) (see Table 5). Linear regression analysis showed occupational participation significantly predicted resilience scores, $b = .59$, $t(39) = 4.66$, $p < .001$. A one unit increase in occupational participation was associated with a .59 unit increase in resilience. Occupational participation also explained a significant proportion of variance in resilience scores, $R^2 = .36$, $F(1, 39) = 82.2$, $p < .001$.

Table 5

Descriptive Statistics and Correlations for Study Variables (N=41)

Variable	<i>M</i>	<i>SD</i>	1	2
1. Meaningful activity participation	449.78	101.41		
2. Resilience	33.41	5.15	.60**	
3. Successful aging	46.17	7.56	0.15	0.01

Demographic Group Differences of Main Study Variables

Independent samples t-tests revealed that there were no significant differences in occupational participation, resilience, and successful aging based on age, race, marriage status, income, employment, length of service, combat veteran status, living situation, or level of education. A significant difference was found in the scores for successful aging based on gender. The 10 female veterans in the study ($M=52.50$, $SD=5.66$) demonstrated significantly higher

successful aging scores, $t(39) = -3.56$, $p = .001$, compared to the thirty-one male veterans ($M = 44.12$, $SD = 5.01$).

Discussion

Phase 1 of this study investigated the relationships between military service, occupational participation, resilience, and successful aging. This study is a step towards creating a clearer understanding of the connections between these variables. While the literature has focused on the negative outcomes of military service, this study advances knowledge of the potential positive long-term impact of military service and occupational participation on the health and well-being of older veterans. In summary, findings from this study indicate that occupational participation may foster resilience among older veterans. This study also indicates that older female veterans may be aging more successful than their male counterparts. In addition, this study substantiates prior evidence that older veterans tend to appraise their military experience as positive despite exposure to combat and aging with service-connected disabilities. I now expand upon these findings in more detail and conclude by discussing the limitations of this phase of the study.

Relationship Between Occupational Participation and Resilience

The present results indicate that older veterans who more frequently participated in meaningful occupations rated themselves as more resilient. Furthermore, the older veterans in this study demonstrated a much higher level of occupational participation ($M = 449.8$) than a sample of civilian older adults ($M = 214.3$) (Eakman et al., 2010). The civilian sample consisted of 154 older adults living in Los Angeles who were on the average older ($M = 80.5$) and mainly female ($n = 119$, 77%). The data from the civilian sample was collected in 2004, 16 years before the current study which could partially account for differences in participation rates. Specifically, the use of technology in society has greatly increased since the early 2000s and the older

veterans in this study rated computer use and computer use for email as two of their most frequent activities. Data collection for this study also happened during the COVID-19 pandemic which caused an even greater increase in computer use during lockdowns (De et al., 2020).

Despite participating in more activities, the older veterans in this study did not demonstrate significantly higher levels of resilience ($M=30.8$) than their civilian counterparts ($M=33.4$) (see Table 6). This contrasts with some work that reported higher levels of resilience among older veterans compared to older civilian adults (Pietzrak et al. 2013; Fogle et al. 2020). These previous studies measured resilience from the same nationally representative sample of older veterans obtained for the National Health and Resilience in Veterans Study, but did not account for potential differences based on veteran cohorts. Given the majority of this study's sample are Vietnam Era veterans (80.5%), differences in resilience may be accounted for by the unique experiences of serving and returning home during this era (MacLean, 2010; Marini et al., 2019; Wilmoth & London, 2011).

Resilience levels may vary by veteran cohort, and may especially vary in Vietnam Era veterans compared to other cohorts. Researchers have pointed out the compounding adversities these veterans experienced including threats to their health and well-being given the nature of fighting in a war without a clear front line, the controversial nature of the war, and the hostile reception veterans received upon returning home which made reintegration into civilian life challenging (Marini et al., 2019). Additionally, compared to other cohorts, the benefits of military service in terms of socioeconomic and educational attainment, marital stability, and health outcomes that were evident for previous veteran cohorts did not materialize for Vietnam veterans (London, 2016; Wilmoth & London, 2016). The additional compounding adversities

faced by Vietnam Era veterans need to be explored more closely in future studies in order to gain a clearer picture of resilience that is specific to this cohort.

Table 6

Comparison of Means for Occupational Participation and Resilience

Study Construct	Study Sample Mean	General Population Mean
Occupational Participation (MAPA)	449.8	214.3
Resilience (CD-RISC10)	33.4	30.8

To my knowledge this is the first study in the occupational science and occupational therapy literature demonstrating a relationship between occupational participation and resilience in older adults or older veterans. Within the life course and aging literature, Pietzrak & Cook (2013) also identified a relationship between occupational participation and resilience for older veterans. Their study assessed the prevalence and correlates of resilience in a large nationally representative sample of older veterans ($N=2,025$). The average age of their study sample was 71.0 which is comparable to the average age of older veterans in this study which was 73.2. Unlike the present study, information regarding service eras and veteran conflict era cohorts were not reported.

Pietzrak & Cook (2013) assessed occupational participation as part of a physical health difficulties scale where participants were asked a yes or no question to report if they required help from another person with their activities of daily living (ADLs) or instrumental activities of daily living (IADLs). The authors found independence in activities of daily living (ADLs) and instrumental activities of daily living (IADLs) were linked to higher levels of resilience. Independence in IADLs was most strongly associated with resilience. In the present study, occupational participation was assessed more robustly moving beyond solely assessing level of

independence. The MAPA assessed overall occupational participation rates in a variety of meaningful activities, not just ADLs and IADLs, over a monthly period. The MAPA also captured what specific activities the sample participated in most often and found the most meaningful.

Relationship Between Gender and Successful Aging

Study findings also revealed a relationship between gender and successful aging. Compared to the male veterans in this study, the female veterans demonstrated higher rates of successful aging. To date, there are no studies in the occupational science and occupational therapy literature that have focused on women veterans (Carroll, 2018). To my knowledge there are no studies in the life course and aging scholarship comparing successful aging by gender in the older veteran population. In a national sample of older adults, a higher prevalence of successful aging has been found in women compared to men (McLaughlin et al., 2010). Additionally, a number of studies have focused on comparisons in factors that influence successful aging between older women veterans and non-veterans. Women veterans are more likely to be remain physically active during their later life (Washington et al., 2016), report higher levels of education and occupational attainment (Padula et al., 2016), and report higher levels of resilience and mastery of self and the environment (LaCroix et al., 2016). The reasons for these differences are not well explained and it is important to note that none of these studies gathered information regarding differences in military service experiences for the women veterans.

In contrast to the finding in this study, another study found women veterans aged 80 and older were not aging successfully as they reported significantly lower perceived health, physical function, life satisfaction, social support, quality of life, and purpose in life compared to non-

veterans (Lacroix et al., 2016). These findings might be different given Lacroix et al. (2016) recruited their sample from a large VA study of women veterans. These participants were already accessing VA services for health care needs which may have biased the sample in terms of preexisting conditions and health status. Wilmoth & London (2013) warned against drawing conclusions regarding all older veterans based on studies that have only included samples consisting of those recruited through the VA system. Lacroix et al. (2016) also conceptualized successful aging differently than in the current study. They used the original model by Rowe & Kahn (1997) which notably included absence of disease or disability in older age. This model has been highly critiqued as too narrow, applying to only 5% of the older adult population, and failing to capture the ways that older adults navigate and age well despite living with chronic conditions and disabilities (Martinson & Berridge, 2015). The current study used the SAS to measure successful aging. This assessment conceptualizes successful aging more broadly based on four well-known models of successful aging and does not categorize those aging with a disease or disability as aging unsuccessfully. Therefore, the finding from this study may be a result of a more nuanced conceptualization of successful aging that accounts for how older women veterans are aging well despite living with disabilities and impairments.

Two studies that focused specifically on the military service experiences of veterans from the Vietnam Era found women veterans who served career terms in the military (serving 20 years or more) had higher educational levels with half having attended graduate school, higher levels of income (Kabat et al., 2018), and better average overall health (Kasier et al., 2017) compared to women veterans who served short (less than 10 years) and medium terms (between 10 and 19 years). While neither of these studies compared the women Vietnam veterans to male Vietnam veterans, their findings regarding women veterans who served career terms could shed light on

why the women veterans in this study had higher levels of successful aging. The women veterans in this study were highly educated with 100% having attended college, and 50.0% having obtained a master's degree. Additionally, 100% of the women were considered middle or upper middle class based on their income level. In the general older adult population, higher education and higher income levels (Cosco et al., 2016; Ozungur, 2019; Waginald, 2003) have been found to be associated with successful aging for older women. From a life course perspective this has implications given many veterans, and especially women veterans, note opportunities for educational and income attainment as a large motivator for joining the armed services (Mankowski et al., 2015). Serving in the military then with long term higher educational and income attainment may serve as a protective factor for successful aging. Further research that considers gender differences for successful aging among older veterans, as well as the factors that influence successful aging for older women veterans is warranted.

Positive Appraisal of Military Service

This study also substantiates prior evidence highlighting veterans' positive perceptions of their time in military service. The majority (97%) of veterans in this study appraised their military experience as having a moderately or extremely positive impact on their lives. This is notable given 61.0% of the sample report serving in combat, and 56.1% reported aging with a service-connected disability. This finding is in line with previous research showing combat and noncombat veterans did not differ in their perceptions of the desirable effects of their military service (Campbell et al., 2017). Vietnam veterans have also been shown to positively appraise their military experiences, despite the controversies and risks of serving during that era (Black, 2015; Kaiser et al., 2017).

This finding contributes to the growing vein of life course scholarship challenging narrow understandings of the long-term outcomes of military service by advocating for more dynamic understandings that account for a full continuum of outcomes (Spiro et al, 2016; Wilmoth & London, 2015). A more dynamic approach to understanding the long-term impact of military service allows for identification of both risk and protective factors that influence the health and well-being of older veterans as the age. In addition, this finding aligns with critiques of conceptualizations of successful aging that do not account for how older adults are aging well despite having a disability or chronic condition (Martinson & Berridge, 2015). The older veterans in this study reported positive appraisal of their military service despite aging with chronic conditions. Research focused on the general older adult population has also emphasized that avoidance of disability or chronic conditions were not predictive of subjective successful aging (Strawbridge et al., 2002; Montross et al., 2006; Romo et al., 2013).

Limitations

In this section I address the limitations of this particular phase of the study. The implications for future research and practice based on both phases of the study are discussed in the final chapter. The primary limitations of this quantitative phase of the study are related to the constraints of the sample. First, the sample size of 41 was below the target sample size of 50 participants recommended for adequate statistical power. Additionally, the sample was largely homogeneous in terms of gender, race, education, and income levels. In terms of military demographics, the sample was also overwhelmingly homogeneous in terms of branch of service and cohort era given the use convenience and snowball sampling. The majority of the sample served in the U.S. Marine Corps and during the Vietnam Era. The age span of participants should

also be noted with ages ranging from 65 to 89. These demographic differences could all have been confounding variables given the variability in military experiences.

The cross-sectional design of this study also limits assertions of causality. The design does not allow for any conclusions to be drawn about causal relationships between the study constructs (Hoffer et al., 2002). It is challenging to conclude which variable exerts influence on the other, for example higher levels of occupational participation predict higher levels of resilience. Another concern relates to the “third variable” problem, in which the relationship between two variables might be explained by some other variable (Cole & Maxwell, 2003). For example, the positive relationship found between occupational participation and resilience may be due to the influence of other variables not accounted for in this study. However, beginning empirical evidence of how the constructs of this study are related advances the early phases of research concerning idea generation and theoretical development focused on the long-term impact of military service and the role that occupational participation and resilience play in the aging of older veterans.

The measures used in this study, specifically the MAPA, also have limitations. Specifically, the MAPA measures the frequency and meaningfulness of occupational participation, but does not go any deeper into individuals’ subjective experiences. It should also be noted that the measure itself is dated given technological advances. Using a measure created in the early 2000s to capture occupational participation has limitations given how daily life has changed since then. This limitation came to light especially with the activity categories of computer use and computer use for email. While these categories were reflective of how computers were used in the early 2000s, in the present participation in occupation through technology takes many forms. For example, under other computer use could be many different

forms of participation from online shopping to connecting with others via social media.

Additionally, phones are used now as small computers for a variety of activities throughout the day. Both the ways in which technology is used and the meaning behind these forms of participation in today's world are not fully captured by the current activity categories on the MAPA.

Another possible limitation related to the measures is the use of assessments that relied only on participant self-report. Due to this, there could be response bias, especially in regards to who chose to participate in the study and their reported positive perceptions of military service. It is likely that those who identify strongly with their military identity, veteran status, and had a positive perception of their time in service chose to participate in the study. Given the snowball sampling recruitment method used it is also likely that veterans who strongly identified in these ways then recommended the study to similar veterans in their social networks.

CHAPTER 6: LIFE HISTORY INTERVIEWS

The purpose of this chapter is to describe the second qualitative phase of this study. First, I describe the qualitative procedures used and my analysis process. I then present the findings that emerged as a result of the analysis including demographic information for the nine older veteran interview participants and then describe in detail the themes and subthemes. The findings are presented in an order that facilitates an evolving understanding of the role of military identity throughout the life course. Additionally, the subthemes for each theme are organized based on stages of the life course to include before, during, and after time in service. This flow of the subthemes was not planned a priori, but when condensing the data, they became organized in this way. The themes are described using pseudonyms and all quotes are provided verbatim with the exception of edits for clarity.

Phase 2: Qualitative Procedures

Findings from the initial quantitative analyses identified potential influences on successful aging for older U.S. military veterans and described a normal distribution of successful aging for the sample. To further explain the quantitative results, I subsequently completed follow-up life history calendar interviews with three participants from each successful aging group (low, average, and high levels of successful aging) (see Appendix A).

Modifications Due to COVID-19

Initiation of Phase 2 of the study was paused from the first week of March until June 2020 due to the COVID-19 pandemic. The IRB paused all in-person research interactions and recommended research design modifications for in-person interactions. This was especially

pertinent since participants for this study are a vulnerable age group being aged 65 and above. To protect their health and continue my research, I submitted a modification to the IRB to adapt the life history calendar interviews from an in-person format to a virtual (Zoom) format or by phone.

Life History Calendar Interviews

Life history calendar interviews were completed with nine participants, three from each successful aging group. Two interviews were conducted via Zoom, and the rest via telephone. The two Zoom interviews were the longest interviews overall with both lasting around two and a half hours. During each of the interviews there was at least one instance of internet instability which required the participants to reconnect to the meeting increasing the overall time. The two women participants who chose Zoom for the interview instead of the phone both had previous experience using Zoom with their families and church groups. The rest of the participants chose to complete the interviews via telephone.

Interviews were completed from July 2020 to November 2020. I notified participants that they had been selected for a follow-up interview via phone or email. I explained the details of the life history calendar interview protocol, obtained informed consent, and scheduled the interview. Prior to completing the interview, the life history calendar matrix was emailed to the participant to fill out (see Appendix B). The calendar matrix provided a framework and cues to trigger recall through use of a person's significant life events as reference points. The calendar matrix included time cues which were organized horizontally into three main time periods of their life (time before military service, time in military service, mid-life after military service, older adulthood). Vertically, substantive life events and cues included (family context, major life events, work, important places you lived, meaningful activities, relationships with others, difficult events/challenges, and strengths/coping strategies).

By sending the calendar ahead of interview time, participants were encouraged to fill out the matrix in ways that made the most sense in constructing their own life history. This structured, but open approach was chosen since older adults often construct their life histories in a non-linear fashion using a range of meaningful reference points across their life course (Feldman & Howie, 2009; Porcellato et al., 2014). Participants can start with positive events and chosen experiences before filling in the parts of the matrix that may be more difficult and emotionally laden, such as military combat experiences (Nelson, 2010). Allowing participants to self-select what details to include can help to redress power imbalances inherent in the research process (Huot & Laliberte Rudman, 2015). Given the participants completed the calendars on their own time and without my help, they were able to choose themselves how best to fill out the calendar, how much detail they wanted to provide, and what events and experiences they felt were most important to include. In this way participants took the lead in this process and were in a position of power as the experts of their own life stories.

Prior to their interview date, participants emailed the calendar to me. Once I received the calendar from each participant, I spent time reviewing each calendar along with the participants quantitative results. I then used this information to develop specific questions for their interview reflective of their life experiences. Interview guides included questions focused on the main constructs of the study, participants' perceptions of their military experiences, occupational participation, resilience, and successful aging. The interview guides were informed by Phase 1 survey data as well as the information they provided on the life history calendar matrix (see Appendix C). For example, one participant included coping with loss of fellow Marines in combat as a difficult challenge he experiences during his time in service. In response to this I crafted follow-up questions to ask more about what resources and coping strategies he used to

get through this adverse experience. Interviews lasted between one hour to two and a half hours with the average length of time 80 minutes. All interviews were recorded and transcribed for analysis.

Reflexive Journaling

In line with the guiding principles of the transformative paradigm as a reflexive approach to research, I engaged in the practice of reflexive journaling after each instance of data collection. This practice of reflexive journaling allowed me to reflect upon the interview experiences as well as acknowledge and think about my role as a researcher focusing on the influence of my personal values and the research design. After each interview I spent time reflecting on the procedure, the experience, and my potential biases. I reflected on my ideas, assumptions, positionality, and insights. I reviewed my notes from the interview and reflected on what and why certain topics caught my attention and my interest in the answers to specific questions. I considered what I had potentially neglected and needed to further explore.

Through this process I recognized that what I determined was important was based on my own presumptions and interests as a researcher and therefore made attempts to identify or uncover aspects of the experience that I may have neglected or misconceived through the journaling process. For example, I questioned if my own experience growing up in a military family and around the Marine Corps influenced what I attended to during interviews and if my own professional experience working with older veterans influenced how I understood a response during the interview. I was challenged to consider the many ways my own experiences shaped the research process and my understandings of military culture. These reflections led me to think more deeply about each interview during transcription and analysis as well as refine my follow up questions and interview skills with each subsequent interview.

Qualitative Analysis

Qualitative analyses followed published recommendations (Saldana, 2013) and utilized both a combination of pen-and-paper methods as well as the analytic software MAXQDA (VERBI Software, 2019). The analysis included 6 phases (see Table 7). First, all interview recordings were transcribed verbatim by the author. Through the process of transcription, the author became intimately familiar with the data. Transcription was followed by repeated readings of the transcripts and listening to the audio recordings. For the first cycle of coding, the interview transcripts were coded line by line using open coding methods to generate initial codes. Coding began inductively and included a combination of descriptive, *in vivo*, and process codes (Saldana, 2016a, 2016b). The second cycle of coding consisted of sorting and grouping the codes generated in the first cycle. Initial codes were categorized according to similarity and observable patterns to form analytic categories. The analytic categories were then collapsed into emerging themes. This process resulted into a codebook with codes grouped into categories and emerging themes. As part of the analysis, a matrix display was then created containing representative themes based on the established codebook and illustrative quotes (Averill, 2002).

Table 7*Phases of Qualitative Analysis*

Phase	Description of the Process
1. Becoming familiar with the data	<ul style="list-style-type: none">• Transcribing, reflexive journal, noting initial ideas
2. First cycle of coding	<ul style="list-style-type: none">• Line by line coding using open coding methods
3. Second cycle of coding	<ul style="list-style-type: none">• Sorting and grouping codes into analytic categories and then emerging themes
4. Member checking	<ul style="list-style-type: none">• Presentation of emerging themes to participants and consultant stakeholders for validation
5. Third cycle of coding	<ul style="list-style-type: none">• Focused and in-vivo coding centered on the role of identity
6. Defining and naming themes	<ul style="list-style-type: none">• Identification and description of major themes and subthemes

At this stage in the analysis, I engaged in member checking with both study participants and two individual consultant stakeholders to validate emerging themes and ensure they resonated with both the larger veteran sample and that female veterans' unique perspectives were captured. Findings specific to the female veterans included many instances of gender discrimination, which prompted me to seek feedback from both participants and consultant stakeholders. These specific processes are detailed further in the following section on rigor and trustworthiness. The combination of feedback from member checking as well as progression of analysis attuned me to the salience of identity to the emerging findings.

A third round of coding was completed to gain a deeper understanding of the role of identity in participants' experiences. This involved a combination of focused and in-vivo coding (Saldana, 2016) with additional significant codes emerging through inductive analysis as all

transcripts were re-analyzed and the matrix updated. The third round of coding generated major themes by reorganizing and categorizing participant data. I was able to clarify and reveal deeper meanings and themes related to identity. For example, I had originally conceptualized participants descriptions of having family members that served as the influence of family tradition and legacy; but, during the third round of coding with identity in mind I realized there was a deeper connection between military cultural values and family values and culture which most participants were exposed to during their childhood. After the third round of coding, I created a final matrix with themes and subthemes, a corresponding description of each theme and subtheme, and illustrative quotes representing each theme. Throughout all cycles of coding, I recorded analytic memos in MAXQDA to capture ideas about the codes and their relationships. The memos served to facilitate identification of patterns, analytic categories, and emerging themes (Saldana, 2016).

Rigor, Trustworthiness, and Researcher Positionality

While a range of strategies to establish rigor and trustworthiness are available to researchers using a qualitative approach given its broad nature (Stanley, 2015), specific strategies were chosen in accordance with the transformative paradigm to best demonstrate the rigor of this study. Strategies used to establish rigor and trustworthiness included: (1) validation of findings through member checking with participants, (2) validation of findings through member checking with two individual consultant expert stakeholders, (3) reflexive journaling, and (4) and peer debriefing. Member checking with interview participants was used as a validation strategy in line with the principles of the transformative framework to enhance participation, give voice, and address power imbalances between the researcher and participants (Doyle, 2007; Mertens, 2007). All participants who completed the interviews were contacted and invited to participate in

member checking of emerging themes. I utilized the technique outlined by Birt et al. (2016) for member checking, providing a concise report to participants that included synthesized data from the whole sample.

Participants chose to receive this report via an email which provided directions and explained that the attached document was a summary of preliminary results developed through analysis of all the interviews to represent the experiences important to most of the veterans interviewed. The report summarized each emerging theme from the results, gave a short description of each theme, and corresponding anonymized illustrative quotes. Participants were asked to read the document and comment on whether they felt the emerging themes resonated with their perspectives via questions such as (a) Does this match your experience? (b) Is there anything you would change or add to make this more reflective of your experience? Empty spaces in the report were provided to encourage participant comment on the emerging themes.

A statement at the beginning of the report reiterated that these findings were not the final results and highlighted the opportunity to influence the analysis through feedback. I prepared two different reports for feedback, one for the male participants and one for female participants, based on the emergence of findings specific to female veterans' experiences. Member checking with participants served several purposes including (1) validating emerging themes, (2) providing an opportunity for reflection, and (3) providing an opportunity to add new data. Five out of nine participants returned comments within four weeks, all were confirmatory in nature with nothing new being added beyond confirmation of the findings presented.

The second strategy used was member checking with two individual consultant stakeholders. Both consultant stakeholders were female veterans who served as gatekeepers to female veteran communities for recruitment. The consultant stakeholders are both personal and

professional contacts of mine, one that I know through my work as an occupational therapist and the other is a personal friend of my family. Consultant stakeholders were emailed a copy of the same synthesized report I provided to the female study participants. I met with each consultant individually via Zoom to discuss emerging themes, feedback I received from study participants, and to receive guidance on how to present the female veterans' perspectives justly. They both offered me extensive feedback which I recorded in my reflexive journal. For example, one stakeholder sent me a chart from her own dissertation research that included the major historical legislation changes that impacted women serving in the military. Access to this chart influenced my thinking about how each cohort of woman veterans were shaped by the historical contexts in which they served.

They each also told me about their own experiences of being women in the military. They shared that study participants' experiences resonated and echoed their own experiences. I used this as further level of validation for the findings that emerged. In the journal I recorded my thoughts and detailed how the analysis progressed while documenting the methodological and analytical decisions I made along the way. The final strategy I used was peer debriefing with more experienced qualitative researchers. Peer debriefing took the form of monthly meetings during the analysis with two peers who provided a fresh set of eyes, opinions, and constructive criticism regarding the meaning of the data, emerging themes, and my own assumptions as a researcher. Again, I reflected especially on my own understandings of military culture that were shaped by being exposed to only one branch of service, the Marine Corps for most of my life. I spent time familiarizing myself more with the specifics of the Navy as its own branch of service given two of my participants were Navy veterans. I used these two branches to compare and contrast my understandings of military culture.

In addition to the above strategies for establishing rigor and trustworthiness, I used reflexive journaling to develop an ongoing awareness of my positionality and identity as a researcher and interpretations surrounding the data. My own life experiences assuredly influenced the unfolding of this research and my interpretations during analysis. By engaging in the ongoing process of reflexivity I was challenged to reflect on my past experiences, biases, assumptions, conceptual baggage (my own assumptions, familiar concepts, and theoretical frameworks that are used explicitly or implicitly that shape my thinking), and awareness of the multiple identities I bring to the table during the research process. I have been interested in and attuned to military culture my whole life. I was born into a military family with my father serving in the U.S. Marine Corps, and I am surrounded by different generations of family members, who have and are still actively serving in different branches of the military. As the daughter, granddaughter, sister, and cousin of veterans, and by virtue of having grown up in a military town in Jacksonville, North Carolina, I entered into the research process with my own understanding of military culture informed by these experiences.

As a researcher I am also reflective of my positioning as an educated, younger, middle-class female who engaged with majority older male veterans. I reflected on how my own assumptions regarding older adults and military culture influenced the development of my understandings as I engaged in the research process. Mertens (2007; 2012) proposed that researchers using mixed methods must develop a strong cultural understanding of their population of interest including historical norms and societal understandings. Atuel & Castro (2018) emphasized the importance of understanding the military as a culture when exploring the varied experiences of veterans. Throughout the research process I continually reflected on my own understandings of military culture, what I still do not know, and what I need to question and

know more about. These reflections in my journal helped me to develop a more nuanced understanding of the military as a cultural context and how this context shapes the lives of those who serve. An important personal revelation that I had during this process was the realization that my understanding of military culture had been shaped from a mainly male perspective due to the male members of my family that served. This was one of the key reasons I chose to engage with two women veterans and expert consultant stakeholders to ensure I had a better understanding of women's perspectives of military culture that challenged my own understandings and assumptions.

Wardale et al. (2015) argued it is useful and important to have a cultural "in" or shared ground with the research population of interest. I found that drawing on my own experiences growing up in Jacksonville and as an occupational therapist who had worked with many veterans provided an opening for me to establish rapport with participants.

Generally, I found that my experience growing up in a family with many different family members who had served in the military, especially my father, facilitated my entrée into the culture and context of this population. I chose to disclose this information about my own life at various points in the process of interacting with participants, depending on their questioning or my own recognition of opportunities where sharing this information was appropriate.

Findings

Participants

Nine older veterans participated in the qualitative phase of this study. Their ages ranged from 66 to 89 ($M=73.33$). Seven of the participants served in the U.S. Marine Corps, and the other two in the U.S. Navy (see Table 8 for demographics). While participants were selected to represent each of the groups of successful aging (low, average, and high), no major differences

were found between the groups. This was determined by exploring potential differences between the groups in terms of general demographics, military demographics, military experiences, as well as comparing across the major themes identified for differences. Findings from the qualitative analysis are described next.

Table 8

Phase 2 Participant Demographics

Pseudonym	Age	Gender	Ethnicity	Education	Military Demographics	Successful Aging Score
Charles	70	M	White	Master's degree	Marine Corps, Enlisted, served 4 years, Vietnam Era	High
Brianna	66	F	Hispanic	Doctorate degree	Marine Corps, Enlisted, served 29 years, Vietnam Era	High
Yvette	89	F	White	Bachelor's degree	Marine Corps, Officer, served 1 year, Women Reserves/Korean War	High
Mary	76	F	White	Master's degree	Marine Corps, Officer, served 27 years, Vietnam Era	Average
Margaret	75	F	White	Master's degree	Marine Corps, Officer, served 10 years, Vietnam Era	Average
Bob	74	M	White	Master's degree	Marine Corps, Enlisted/Non-Commissioned Officer, served 4 years active duty and 6 years reserves, Vietnam Era	Average
John	72	M	White	H.S. diploma	Marine Corps, Enlisted, served 9 years, Vietnam Era	Low
Jack	70	M	White	Bachelor's degree	Navy, Enlisted, served 29 years, Vietnam Era	Low
Irene	68	F	White	Master's degree	Navy, Enlisted, served 3 years active-duty and 20 years reserves, Vietnam Era	Low

Themes

A total of three themes emerged from the data, (1) Family Ties, (2) Military Identity, and (3) Resilience. Each theme has three subthemes which describe participants' perceptions regarding their military service and its impact on their lives (see Table 9). The three themes are presented in an order that facilitates evolving understandings of the role of military identity throughout the life course. Given the participants only represented specific branches of the U.S. military, the Marine Corps and the Navy, understanding of military identity that are presented in the findings are specific to these two branches of the military. The subthemes for each theme are also organized based on stages of the life course to include before, during, and after time in service. As noted in the introduction this flow was not planned, but as analysis progressed, they became organized in this way.

Table 9

Themes and Subthemes with Illustrative Quotes

Theme	Subthemes	Illustrative Quote
Family Ties	Family Military History & Culture	“He (Dad) served with the Marines in World War II, as a medic, in the South Pacific and right from the time I was able to remember anything, all Dad could talk about was the Marines. And he taught us to sing the Marine Corps Hymn. You know that’s probably the earliest thing I learned to sing!”
	A Bigger Family, the Military as Family	“When we walked into the hospital there were all these Marines and even though they were hurt, they were laughing and joking around. That had a big impression on me, that sense of camaraderie. I really missed having a family, I felt abandoned after my mom died and I guess I kind of thought I could have that and be a part of a bigger family in the Marines.”
	Maintaining Military Connections	“I was series commander, had great drill instructors, enjoyed it. Facebook has been wonderful, the Women Marines Association has a Facebook page and every time

Theme	Subthemes	Illustrative Quote
		I respond to something on there, somebody jumps on there and says back to me I was in your platoon in 1975 do you remember!?”
Military Identity	Military Identity Saliency	“I think it was because I saw the transformation in myself of going from a civilian to becoming a Marine and I wanted to be a part of that transformation. I really wanted to be a part of influencing young girls coming in and being a part of that foundational training of them becoming Marines.”
	Expressions of Military Identity	“You've got a lot of opportunity as a Navy corpsman. We could do, Navy corpsman do an incredible amount of work and very sophisticated stuff that you would not find anybody doing on the outside you know. And being associated with Navy medicine, which was just a great, great, we did a lot of good stuff and we provided excellent care.”
	Post-Service Identity Negotiation	“I had to think about retirement...how I was mentally going to change from a Sgt. Major with all these responsibilities to a private civilian wandering around looking for something to do. On the day I retired from the Marine Corps I weighted 185lbs and three months later I weight 161lbs, yeah I was nervous.”
Resilience	Cultivating Resilience	“When you have to travel through every part of the training and the experiences and the things you encounter as a Marine, that right there creates resilience in and of itself. I mean it's like from start to finish...I would say automatically adopted or formulated in a person that has experience you know being a Marine.”
	Being a Woman in a Man's Military	“I always had to have "the talk" with these folks that weren't treating me professionally.... I had to have that talk and I've been having these talks. But again, I think that was the challenge of being a woman in the corps...he was professional and it got so much better, but again it having to have that stamina and that endurance to be able to have I used to call it a talk because that's what it boils down too.”
	Activating Military Identity	“I'm 89 years old and I've got my great grandchildren telling me 'Well she's a Marine, she'll do it one way another!'”

Family Ties. Throughout the interviews, participants identified the importance of family connections to their military experiences. They spoke about social bonds and familial ties to both their blood relatives as well as to those they served with which they considered family. These connections came up during all phases of the life course. Participants noted how their lives were linked to others in ways that influenced their entry into service, reasons for staying in the military, and desire to maintain military connections after their time in service.

Family Military History and Culture. All participants had a family member that had served in the military. Given their age cohort, many had fathers or grandfathers that served during WWII. Bob spoke about his father's service in WWII, "My dad he did heavy equipment, construction. He did that then he joined the Navy and they made him one of the Seabees, the construction battalion... he was one of the original in 1942." Similarly, Yvette recalled the impact of WWII on her family, noting, "Every man, during World War II, every male member of our family, every male cousin that I knew of including uncles who were in their thirties and forties all served." Many veterans described a family history of military service with family members from multiple generations serving. Mary explained she was the third generation in her family to have served in the Marine Corps, "We had three generations that served in the military. I am the first one that was career. My dad went in 39 and came home in 46, he never got the Marine Corps out of his heart."

Veterans that had a legacy of military service in their family expressed pride in continuing this tradition. Margaret illustrated the importance of carrying on the family tradition, "The pride of knowing I was serving my country and that I was following in the footsteps of not just my father, but other predecessors on a long line back to the War of 1812." Brianna spoke about how her mother's dream had been to serve in the Marine Corps and how this dream had

become her own. She illustrated how her mother's dream did not come to fruition, but instead lived on in her daughters:

Well, my mother always wanted to be a Marine, her first husband was a Marine, but of course she wasn't able to because she had my sister and that door never opened for her, but that was something she wanted to do. So, she just kind of had that dream and hope for my oldest sister, which my sister did and then it just kind of trickled down to me.

As a result of having family members that served, participants described how they were exposed to the culture and values of the military at an early age. This was a common thread for those whose fathers had served. Mary recalled that, as a child, her father proudly wore his Marine Corps baseball hat. She jested she was always meant to be a Marine sharing with me a family story about her conception:

He (Father) was shipped right down to New River which was where they were going to embark on ships, you know Morehead City and go to the war. And my mom went down there and spent a weekend, the old hostess house and New River Air Station. My dad got liberty and spent the weekend with her and about 9 month and three days later I was born. So, I know exactly where I was conceived and perhaps that's why I ended up being a Marine, I don't know Karma!

Another participant described how from a young age her father spoke to her about his experiences in the Marine Corps. She recalled these were some of her earliest memories, "Right from the time I was able to remember anything, all Dad could talk about was the Marines. And he taught us to sing the Marine Corps Hymn. You know that's probably the earliest thing I learned to sing!" Similarly, Yvette noted how her father's stories about service impacted her experience during bootcamp noting, "The easiest part of the training was Marine Corps history because my dad had poured that into me my entire life."

A Bigger Family, the Military as Family. When asked what they valued most about their time in service, many veterans talked about the sense of camaraderie, belonging, and close emotional bonds they shared with others who served. They often described their friends from military service as family and their branch of service as a larger family itself. A few veterans

stated explicitly that their longing for a sense of family was the biggest reason for deciding to enlist. Charles detailed a particularly powerful experience of going to the hospital with his Dad to visit his injured brother who also served with the Marines during Vietnam:

When we walked into the hospital there were all these Marines and even though they were hurt, they were laughing and joking around. That had a big impression on me, that sense of camaraderie. I really missed having a family, I felt abandoned after my mom died and I guess I kind of thought I could have that and be a part of a bigger family in the Marines.

Brianna similarly described how childhood experiences shaped her decision to join. She noted her childhood was socially isolated due to her mom being an immigrant from Mexico. She reported that her mother was very protective of her and her sister, who often only had each other to play with. She stated, “Joining the Marine Corps for me was awesome because it provided probably everything, I was lacking in my childhood years, like you know belongingness and camaraderie.”

This emphasis on camaraderie and belonging came up again when veterans were asked what they liked the most about being in the military. Participants referenced forging friendships and never feeling alone as what they valued the most about being in the military. For example, Yvette shared, “One reason I loved it was the sense of, I don’t know the word for it, is that you have people there, you have people who, there’s a safety system...you were never alone.” Many used the word family to describe the close emotional bonds and connections they formed with other service members. Irene recounted how important these connections were for her when she was stationed overseas:

The friends when you’re in a foreign country and you have no family around for Christmas or Thanksgiving or whatever... that’s your family. And we still have friendships with those people. We left Italy in 1986 and we still have friendships with at least three of those families that we were with over there with.

Maintaining Military Connections. Veterans emphasized that their close bonds and connections to those with whom they served did not end after leaving the military. For many, the friends they made and considered family remained some of their most important social connections throughout their rest of their lives. John shared how he planned a trip with his wife to see some of his buddies he kept in touch with before his most recent lung surgery explaining, “We went on a trip in March right at the start of the pandemic...visited a couple friends that I was in radio relay school with in 1965. We went out to dinner with them and their wives.” Mary reflected, “I know that everybody I can count on in a clutch, with my life, is someone I met in the Marine Corps. They are just people I can count on that I never would have met if I hadn’t been in the Marine Corps.” Yvette similarly spoke about how deep the bonds were between her and two friends she served with. These bonds lasted throughout her life:

You always thought about your buddy, you call them buddies now, we didn’t call them buddies then, but I mean, I think of, you know, those two, I would have laid down my life for them, absolutely, I would have done anything for them and throughout our lives, I mean until they died. We were always in contact.

In older age, the veterans spoke about how staying in touch with other veterans and maintaining military connections continued to be very important. All participants described being connected to the military through different veterans’ service organizations. For example, John stated, “I belong to the 3rd Marine Division Association...I’m a life member of the Khe Sanh Veterans and life member of the Marine Corps Tankers Association. I’m fairly active in all of those.” Margaret spoke about how she always takes the time to interact with veterans from various service organizations that she sees out in the community.

She described how any time she encounters fellow Vietnam veterans, “...collecting for Wounded Warriors or something, I’ll always go up to them and say ‘Hey there Marine, what

years did you serve?’ And then I’ll say ‘I was ’66 through ’76, Welcome home.’ And we always have a good conversation.”

Social media, especially Facebook, played a key role in helping veterans maintain military connections. Mary, who was a series commander in the Marines, spoke about how she enjoyed connecting with many of the women she trained over the years. She expressed, “Facebook has been wonderful, the Women Marines Association has a Facebook page and every time I respond to something on there, somebody jumps on there and says back to me ‘I was in your platoon in 1975 do you remember!?’” Margaret also emphasized how she used Facebook to not only keep up with those she served with, but also the younger generations of women Marines:

There’s a bunch of Facebook columns and so I’m always getting posts from different ones I know and I know some of the girls are having a hard time with suicidal thoughts and the VA not coming through for them...And I keep up with, I try to keep up with what the younger Marines are doing, what they are wearing, what their uniforms are like, what the policies are like, what their training is like. And I’m just blown away, just blown away by these gals!

This importance of family ties to both blood relatives and other service members and veterans was evident in the ways participants talked of the strength and importance of these relationships. It was apparent that these relationships influenced all stages of the life course for participants. Many noted how their own families of origin identified as military families and how they were exposed to the values and culture of the military in influential ways during childhood and adolescence that shaped subsequent stages of their lives. These strong social connections and being part of this larger bonded group served to shape the participants identities over time.

Military Identity. This theme addresses how participants’ military identities intersected and influenced their other identities at different life stages and how negotiating identities influenced and was influenced in turn by participation in occupation over time. Despite all

veterans providing retrospective accounts of their military experiences, within the interviews it became clear that for the participants their military identity was not something they left behind when they left the service. Instead, they all constructed accounts of themselves as having military identities in the present. Veterans spoke about how serving in the military shaped who they were and how they continued to view themselves as people. Participants described how being in the military transformed their identity, how they expressed their military identity through occupations, and how they maintained their military identity as a salient identity over time. Participants also described how their military identity affected and at times caused tension with other identities throughout their lives.

Military Identity Salience. The majority of participants acknowledged their military identity became their most salient and dominant identity. For example, Bob stated “I think joining the Marine Corps was the smartest thing I ever did...it has defined me.” Likewise, John noted that even now he described himself as, “I’m still pretty Marine Corps.” In their interviews, veterans highlighted how joining the military transformed their identity. In talking about why they joined the military many noted specifically that they wanted *to do* and *to be* something more. For example, Bob noted “I was just a kid wandering around, it taught me skills and rights, it just helped me be the person I am today.” Similarly, Irene mentioned, “I didn’t want to stay in one spot, stay there forever. I wanted to see and do some things and I thought the way to do it was to join the military.” For most veterans, formation of their military identity began during the transformative period of bootcamp or officer candidate school. During this period participants internalized military culture, a certain set of values, and learned new ways of doing and being through military occupations. Many described how their military identity became more salient and dominant as they gained membership into the military as a new social group. Brianna

described this process and explained this was the reason why she wanted to be a drill instructor later in her career:

I think it was because I saw the transformation in myself of going from a civilian to becoming a Marine and I wanted to be a part of that transformation. I really wanted to be a part of influencing young girls coming in and being a part of that foundational training of them becoming Marines.

She further emphasized how boot camp instilled in her the values and culture of the Marine Corps reflecting, "...they got engrained in my head, you just start operating from them and you keep them and use them for life skills."

Mary similarly recalled how she transformed as a person and her military identity became more salient during Marine Corps Officer Candidate School (OCS). Mary joined the Marines later in life while she was already working as a teacher and finishing her master's degree in education. She joined originally only to go to OCS school for the summer as a way earn extra money after talking with a recruiter. She explained, "He said to me...this is what you would make and it was more money for the 11 weeks of OCS than I would make all summer teaching summer school!" In the beginning she did not have any intention of staying in the Marine Corps as she enjoyed her job as a physical education teacher and girls' basketball coach.

She described how her plan to drop out voluntarily at the end of OCS changed though once she learned from the commanding officer that she was the honor candidate for her class:

She calls me in and says I just want to congratulate you; you are our honor graduate. That gives you pause, are you going to walk in two days later and say I want to drop on my own request and I thought I can't do that! I really can't do that, besides...it really had kind of gotten to me, it really.... I really wanted to be a Marine.

Despite her original plan, her military identity had become more salient than her identity as a teacher and she chose to stay in the Marine Corps as a career for the next 27 years.

For a few participants though, their military identity was not as salient and dominant. While they also went through bootcamp, they acknowledged ways they did not fully internalize

and adopt military social group norms and how at times this caused tension between their military identity and other personal identities. This was especially true in the case of Jack who described himself multiple times as “non-military.” He shared he didn’t originally sign up to serve, but was instead drafted during the Vietnam War. He was not happy about being drafted, but made decisions that helped to keep him from going to war. For example, Jack was drafted by the Army originally, but described how he went to a Navy recruiter office to avoid the front lines:

I pulled it out (envelope) and it was from Uncle Sam and it said greetings you are hereby ordered to report for induction into the United States Army on such and such a day and I went intuitively darn! I didn't want that. So, my buddy drove me downtown with the envelope and I went into the Navy recruiter.

When he joined the Navy, he decided to go to school to be a medical corpsman instead of being a sailor on a ship as a way to stay away from being sent to war.

He spoke about how felt more comfortable among the corpsman who identified more as medical professionals than with a more stereotypical military identity. He said, “I didn't think corpsman were gonna go to war... I learned a lot of good stuff as far as medicine goes, but they tried to make us into military people and corpsman are notorious for being non-military.” He described how corpsman were non-military in the ways they joked around during marching drills and were more relaxed about their uniforms and haircuts. He recalled not getting along with a commanding officer because, “I was non-military, I was wearing my hair a little bit too long, he was always asking me if I could get a haircut. And he didn't like me wearing my tech jacket, he wanted me to wear a uniform.” Jack gave other examples of clashes between himself and other officers over the years who felt he wasn’t being “military enough”.

For all the participants, entry into military service had a transforming impact on their identity. For many their military identity became their most salient identity replacing other

personal identities from before their time in service. There were differences though in the internalization of military identity based on each participants lived experience. Military identities then were constructed on an ongoing basis in the participants lives. The situated and interactional accounts of military identity that emerged pointed to an understanding of individual military identities as rooted in everyday ‘doing’ as participants expressed their military identities through participation in occupation.

Expressions of Military Identity. It became clear in conversation that for the participants individual military identities were expressed through participation in specific occupations. During their time in service, the military offered many veterans specialized training and education. Veterans described making the most of training and education opportunities as well as professional skills and expertise as ways they expressed their military identity. Brianna spoke at length about how the Marine Corps offered her an education leading to a career as a counselor conveying, “I was able to get my bachelor's degree...my discipline was psychology so I worked in a family service center in Okinawa. I did that for three years and while I was there, I finished my master's because I loved counseling so much.” In recalling his career in the military as a Navy corpsman, a medical specialist, Jack also spoke about his professional expertise:

You've got a lot of opportunity as a Navy corpsman, you have a lot of opportunities. We could do, Navy corpsman do an incredible amount of work and very sophisticated stuff that you would not find anybody doing on the outside you know. And being associated with Navy medicine, which was just a great, great, we did a lot of good stuff and we provided excellent care.

A common thread in the women veterans’ conversations was an awareness of gender differences in the occupations they were able to participate in compared to the men. The women veterans reflected on how their identity as women barred them from participating in military occupations they considered most confirming of a military identity, especially weapons training. This conflicted with some of the women’s personal identities of being proficient markswomen.

Margaret told me that she grew up shooting firearms with her father who was a Marine veteran. She took pride in her ability as a markswoman. She was frustrated that she was not able to demonstrate this expertise in the Marine Corps just because she was a woman. Margaret expressed, "I was always sorry that we didn't have to do firearms, because I happen to be an excellent shot, but I didn't get a chance to prove it." She described a when she was able to demonstrate her expertise as a markswoman it did not go over well with the male officers. She shared how officers from her battalion often had pistol matches and that she was finally invited one time to participate. She came in second in the whole battalion and then was asked not to come anymore stating, "Not only because I was a woman, but because I was good. I think if I had been all thumbs with a pistol, that would have been different, but I was good. And that was threatening."

Mary also found women's limited opportunities for firearms training frustrating. She shared with me a story from OCS training where the women shot obsolete weapons:

To give you an idea, the guys had both rifle and pistol instruction, but there was no policy of women carrying weapons at the time. So, what they did for us, they let us fire a BB gun and one glorious day they had all this surplus Vietnam ammunition...they took us out one day and had us fire the M79, which is a grenade launcher! They were just finding something for us to do while the guys actually shot the weapons that you know we would have liked to fire because those were the weapons of the Marine Corps.

The women veterans also described how their identity as a woman in the military did not adhere to the Marine Corp's or Navy's version of a woman Marine or Sailor. All of the women expressed they wished they had been able to participate in the same training as the men compared to the other training the military thought was appropriate for women at the time. They described how instead of being able to participate in weapons training, much of their training was focused on "being a lady." Margaret explained:

We were supposed to be ladies all the time and thank God that has changed. You're not going to believe this, but we had finishing school classes, where we were taught how to hold our feet when we sat and how to gracefully enter and leave a room.

Brianna likewise recalled, "The emphasis back then when I joined was more on kind of being a lady. So, they literally had classes on how to properly you know have a tea and even how to light your cigarette if you smoke." Brianna, who very much enjoyed the competitive physical fitness aspect of being in the military, expressed she found the emphasis on "being a lady" demeaning. The women veterans noted that this emphasis on proficiency in certain occupations, such as hosting tea, as well as bodily composure and manners, was at odds with their own views of themselves as women in the military. They highlighted a main aspect of their identities as women in the military was an understanding that they were different from other women. They took pride in going against the societal norms for women at the time and choosing to do something that was considered challenging and against the grain. For example, Margaret described, "I have a great deal of pride that I did something that most women of my generation were not doing then...I'm proud that I was able to get through, pretty much, with flying colors all my training." Yvette shared with me a similar sentiment about how compared to the other women in her family she was considered the oddball for joining the Marines:

They thought I was the oddball, because to them you went to school, you got out, you got married, you had babies. And that's what they all did. And the idea, they sort of looked at me askance, I mean I was the weirdo who was going into the military, you know, "oh my God, what's the matter with you?"

The military's emphasis then on participation in occupations that were considered more traditionally domestic and feminine did not align with the women's own ideas of themselves and the types of activities they felt were capable of participating in and meaningful expressions of a military identity.

Expressing a military identity, for both the men and women participants, took the form of participating in major military and historical events including both armed conflicts and humanitarian missions. Across the board, when I asked about their military career, each veteran underscored the significance of being a part of a major event during their time in service.

Within the sample, participants discussed being part of the Korean War, Vietnam War, and the Gulf War. Yvette recalled how her Women's Reserves unit was called up unexpectedly during the Korean War, describing, "All of a sudden the Korean War is looming... we get this notice from Washington that they are going to activate reserves. I was pulled out and sent out here with the non-comms to San Francisco to replace a specific Marine."

Some participants described engaging in humanitarian efforts during their time in service as markers of their military identity. At the end of his military career, Bob recalled with pride being a part of a humanitarian effort in the Middle East stating, "Basically, this was a humanitarian effort ... I was the command Sergeant Major of the joint forces, 12,000 troops. We brought back the Kurds and put them in camps and got them help." Jack also recalled a major event in his military career that happened during the Cuban Missile Crisis. He described how his team's medical skills were put to the test:

During the Clinton years Castro had done some pretty nasty stuff down in Cuba and these people were fleeing the country as fast as they could. At one point they had like 60 or 70,000 Cuban migrants and all of them were waiting to become American citizens so they would have a flight come in once a week and have a couple of hundred of them out. And they would fly these people out, but we had to take care of all these folks, we had to get them medically qualified and acclimated to, they were going to the States.

An interesting way that participants also expressed their military identity took the form of describing themselves as "cultured" which they credited to experiences during their time in service. Veterans talked about how they received a "cultural education" with some noting that before joining the military they had not seen much of the world describing themselves as "a

small-town boy” or from “a farming community.” Veterans recounted how being stationed in different parts of the country or serving overseas tours of duty exposed them to other cultures and ways of life. Irene shared that one of the biggest benefits of serving in the Navy for her was, “You got a cultural education too. Meeting different people. When I was stationed in California, three of the guys in our department were from the Philippines, so I got to learn to like Filipino food.” Bob likewise recalled how much he enjoyed being stationed in different parts of the world noting, “I liked Okinawa, I liked exploring it. And I also tried to learn a little bit of the language and pay attention to some of the customs.” Their military identity then as someone who was cultured, had lived and experienced more than small town life because of the military, became more salient with these experiences. Veterans described how these experiences during military service instilled in them a lifelong love of travel and appreciation for different cultural experiences.

Veterans also described how being in the military exposed them to people of different racial and ethnic backgrounds, and different perspectives and ways of seeing the world. For many of the veterans, going to Marine Corps bootcamp in South Carolina was the first time they had ever met a person of color. Bob explained, “One of my buddies, Dudley, he was a black... I mean Humboldt Iowa was all white. When I went to bootcamp was the first time I had been around people of a different race.”

Veterans spoke about how these experiences were eye opening for them, and how part of their military identity was seeing themselves as open minded and tolerant people. For example, Jack described in his role as a Navy Corpsman:

I have X-rayed thousands of people that were in the military and different branches, different ranks, from three-star admiral to E-1 okay and each one is different...I've learned to be open enough and flexible enough I can deal with each of them on a different level.

Irene reflected on how her time in service opened her up to other ways of seeing the world than she would have been exposed to if she had never left her hometown:

The more experiences you have, the more tolerant you are of other people's ideas. Having been in the military, met people of all different races and creeds and countries and ideas, it just gave, I guess, a better idea of how the world runs. How you can interact with people and the experiences that you bring to them. I don't think I would have had that experience if I had just stayed in Charlotte, North Carolina and listened to the prejudices and bias that different friends and family members had about what ever. You were able to go out and get your own ideas

Military identities are constituted and expressed through participation in specific occupations. The veterans as service members participated in military occupations and events that confirmed their military identity. The women in particular gave examples of how their military identity intersected with other identities to influence their participation in certain occupations. In this way it became clear that participation in certain occupations within the military context were meaningful signifiers of a military identity.

Post-Service Identity Negotiation. Transitioning from the military to the civilian world can be a challenging life-transition that can strongly impact a person's identity. Veterans described different reasons for leaving the military, but all noted ways they had to negotiate their military identity with other personal identities during this transition and in their post-service lives. For some of the women veterans, their gender and military identities came into conflict during this time period. They talked about how the reasons they left the military were directly related to their gender and becoming or being a mother. They described how their military identity was in conflict with their identities as mothers and that ultimately their identity as a mother became more important. For Yvette, the decision to leave the Marines was decided for her by the military's policy regarding pregnancy. During the Korean War women were not allowed to serve if they became pregnant. She recalled, "I got pregnant and, in those days, you couldn't stay in if you were pregnant. It was bittersweet, it was. Because, I'll be very honest with

you, I would have stayed in.” She described how this was bittersweet for her because her identity as a Marine was very salient, but because of the policy at the time she could not be both a mother and a Marine at the same time.

Compared to Yvette, both Irene and Brianna served during time periods when in policy women were allowed to be pregnant or have children while serving. They described how in reality though it was difficult to balance having children while serving. They explained they had difficulty balancing being in the military with being the kind of mothers they wanted to be for their children. Irene originally stayed in the Navy after her daughter was born, but then made the hard decision to retire because if she reenlisted, she would have to go overseas for a tour of duty on a ship. She told me, “I didn’t want to take the risk. I was afraid if I went ahead and re-enlisted, I would live, be on that ship for three years and my daughter was only nine months old at the time. So, I retired in 2000.”

Brianna acknowledged she was a single mom to three children for 10 years while serving. She was able to stay in the Marines and make family life work with the help of her mother who would watch the children when she was stationed overseas. When she had her fourth child though, she described how she had to negotiate between her identity as a Marine and her identity as the mother of a child with special needs:

When I had him he was special needs, of course he needed a lot of different therapeutic interventions which I was always the type of Marine where I took the least amount of time off from work so I found myself having to take him to physical therapy, occupational therapy, so many therapies I thought I needed therapy! So, I was taking time off work and I was the master gunny I was in charge of the whole consolidated admin and my Captain was so gracious he said to me don't worry about it take the time off, but it was my own personal conviction of taking time off, it just didn't sit well with me. So that's why after I finished my two-year requirement at that duty station I decided to retire.

Brianna was having difficulty being both the Marine she wanted be and the mother she wanted to be at the same time. She ultimately decided to retire in order to stay home with her son for a year and then entered into the civilian workforce.

Six of the nine participants, including Brianna, qualified for military retirement by serving 20 years or more. For these participants retirement was described as a challenging life transition that had a major impact on their identity. For those that had a more salient military identity, the transition to civilian life was described as more difficult.

Bob noted the importance of his military uniform as a material expression of his military identity stating one of the most difficult parts of retiring was “Figuring out what to wear!” Participants expressed feeling too young to retire, nervous to leave the military cultural context, and unsure of next steps entering the civilian world. The enforced low age of retirement in the military was experienced as highly problematic for many participants. Participants described feeling angry and resentful towards the military’s strict age restrictions which they felt forced them into retirement despite feeling they could continue working. Bob explained:

I was doing great, I was in great health and physical shape, doing good stuff and I was enjoying myself immensely. But they said I didn't have any choice I had to go. So, the last 18 months in the Marine Corps the only thing I had to do was think about retirement, get ready for retirement.

Mary also spoke about feeling the pressure to retire in her mid-fifties. She described how nervous it made her to change careers in mid-life stating, “You know, what are you going to do when you retire, you're too young to really be retired, you don't want to start something like chaplaincy at 56.”

Participants talked about how after retirement they experienced challenges to their military identity as they entered into the civilian workforce. They gave examples of the ways that their military norms and values jarred with less structured ways of life. Many veterans expressed

disdain for the way civilians worked compared to the values of the military, clearly seeing themselves as set apart from civilians in the workplace due to their military identity. Bob keenly felt his loss of status in the Marine Corps and portrayed this identity negotiation when he worried about, “How I was mentally going to change from a Sgt. Major with all these responsibilities to a private civilian wandering around looking for something to do.” Brianna described how hard it was for her to adjust to working a civilian job after 29 years in the Marine Corps:

It was very difficult adjusting to civilian life because the ways that civilians in the work sector work is like night and day. It was a very big adjustment...which I was very mindful of the differences, but it was very challenging and it was uncomfortable at times.

She found the lack of structure and discipline in her fellow employees difficult to understand and she had trouble fitting in socially. She also noted it was hard after all of her leadership training in the Marine Corps to work for other people that she considered less competent and with much less leadership experience. In this way her military identity influenced her worker identity in terms of how she felt things should be done in the workplace and the standards she held for her own behavior and performance. For both Bob and Brianna, their salient military identity ultimately led to clashes in the workplace when they disagreed with how things were done in the civilian context. Although Jack described himself as “nonmilitary”, he also told me about the differences he experienced between practicing as a medical profession in the Navy versus in the civilian world. At the age of 49 years old he retired from the Navy after serving for 29 years. After retirement he got a part-time job at a civilian hospital and recalled it was, “The absolute pits, absolutely, it was an X-ray job, I was in charge of the department and it was awful...after 6-7 weeks I said I can't do this anymore. His civilian worker identity influenced by his military identity in terms of how he valued structure and leadership in the workplace. For him the lack of structure and leadership at the civilian hospital led to infighting and politics in the workplace that he found difficult to deal with after his time in the military.

Another way many participants described negotiating their military identity with other personal identities in their post-service lives revolved around how they were received and perceived by others given their identity as Vietnam veterans. Seven of the nine participants interviewed served during the Vietnam War. They all reflected on the difficulties they faced after service not just because of their military identity, but because they identified as Vietnam veterans in particular. For example, Charles spoke about how he was treated as a Vietnam veteran by other veterans:

You know some Vietnam veterans weren't even allowed to join VFWs [Veterans of Foreign Wars Organization] when they got back? World War II and Korea veterans turned up their noses and said that what we did wasn't really a war. Well, I will tell you it was a war alright; I lived that war and I'm proud of what we did, it was the same thing they did, you fought for what you thought was right.

Charles found it difficult to not be acknowledged and accepted by other veterans, especially given his pride in identifying as a Marine Corps infantryman and combat veteran. These experiences influenced Charles so much that later in life he began running PTSD groups for younger veterans from the wars in Iraq and Afghanistan to ensure they felt welcomed and supported by older generations of veterans.

Margaret, who served in an administrative role during Vietnam, shared that even though she never served overseas, she also experienced stigma identifying as a Vietnam veteran:

Even today, when you meet a Marine veteran or any other Vietnam veteran, you're supposed to say "Welcome Home" because we were, we, I say we collectively, were not welcomed home. We were vilified. We were baby killers. And even now, from time to time, people found I've been in military, I get 'that look.' You know, 'what were you doing?' Well, actually I was serving my country, as best as I knew how, whether the government was right then or not, I didn't know, I was just serving my country.

Both Bob and John described attending college at different points in their life after service and having experiences where their military identities proved problematic. They experienced stigma for having served in Vietnam and recalled uncomfortable moments during

class when arguments happened with their professors and other students about the Vietnam War.

Bob noted he started taking classes about six months after his time in service ended detailing:

This is of course the time of the big anti-Vietnam protests and stuff. I wore a field jacket around and people tended to leave Marines alone for some reason you know, so I didn't get any real grief. I did happen to take a course on the history of Vietnam and the professor and every other kid in the class was against the war and I was for it so I was fighting every day.

Despite noting instances in their post-service lives where their military identity was at odds with other identities, veterans described ways they negotiated these identity conflicts. One way this happened was by engaging in occupations that felt familiar and confirming of their military identity. This took the form of engaging in occupations where they were around others who had served and organizations that understood or were similar in structure and culture to the military. Participants explained how engaging in these occupations was not always a conscious decision, but instead how they were naturally attracted to these types of occupation in their post-service lives.

Veterans described how they “wound up” in similar cultural organizations and jobs with a “military flavor” after struggling to adapt to new civilian working environments. After trying a couple different jobs in the civilian context, Brianna took a job as a military contractor explaining, “I bounced back over to work with the military...which was good it was good for me. I found myself venturing back into environments that were more, that had more of a military flavor if you will.” Bob similarly recounted how happy he was after working in two civilian jobs he hated when he finally got a job at Marine Federal Credit Union noting, “I got a job at Marine Federal Credit Union teaching financial classes to young Marines and Sailors, right back to what I was doing when I was a Sgt. Major, mentoring young troops, I loved it.”

Another way participants negotiated the salience of their military identity in their post-service lives was through engaging in occupations within an extended armed forces context. This

especially took the form of connecting socially and serving other veterans and service members. Veterans participated in volunteering for the Department of Veterans Affairs (VA), leading groups for active-duty service members and veterans dealing with PTSD, building websites to help women veterans connect, and serving on veterans' committees. By participating in these occupations, they were able to continue expressing their military identity by connecting to others who were part of this ingroup through shared experiences. For example, Margaret stated as soon as she relocated to a different state a couple of years ago, she went right to the nearest VA, "They were looking for volunteers in the hospice and who is better in the hospice than an older adult minister who has sat by many bedsides as people have passed away." Charles shared how he struggled with PTSD from his time serving in combat during Vietnam, but found a calling helping younger veterans work through their own trauma. He runs group programs with the VA in his community and explained:

I think having PTSD and being in war though has given me a lot of compassion. I need to help other people and these programs that I run helping young people deal with their own trauma, I can do that because I have lived through my own war.

Brianna likewise participated in helping younger generations of veterans. She reflected that during her time in the Marines "There was no place where we could come together as women and focus in on being women Marines, there were no ways for women Marines to connect with each other." She recalled how lonely it was at times being the only woman at a duty station. She used her skills as a counselor to help solve this problem:

I'm working with one veteran, she has built a website...and this website is going to provide all women Marines a place that they can go on a website to connect, to reconnect, it's going to be for veterans, for active-duty members, any woman Marine that is in America.

Participants experiences illustrated the ways they negotiated their military identities with other personal identities in their post-service lives. After service veterans engaged in occupations

that had a ‘military flavor’ and allowed them to continue expressing their military identity which continued to be a salient and valued identity. In their post-service lives their military identities also served as an asset facilitating their resilience over time.

Resilience. When asked what lessons they learned from the military and how the military impacted their lives, many participants described the biggest lesson they learned was how to overcome adversity. John expressed, “I learned to roll with the punches and come up with a plan to deal with adversity.” Participants reported that learning to deal with stressful situations was just “what you do” and “how it’s done” in the military.

Bob shared that the Marine Corps taught him “To advance towards the guns” and meet stress head on. Participants gave examples of how this ability to overcome adversity was instilled in them through their military training and facilitated their ability to cope with stressful situations throughout the rest of their lives. In this way part of having a military identity was seeing oneself as someone who could overcome adversity and was trained to deal with stressful situations.

Cultivating Resilience. Veterans shared how the military context itself provided them with training and experiences that cultivated resilience. They described how they developed resilience through challenging experiences when they had to prove themselves and adapt to adversity. Participants talked about stepping up to these challenges and how this process cultivated resilience. John described how bootcamp served as a context where resilience was cultivated by his drill instructors:

They taught me to take responsibility for my actions, they taught me to focus on the mission and get the job done. And they gave me resiliency, tenacity, and self-discipline. So, because of them I've led a long, healthy, and successful life and I thank God for them every day.

Brianna also noted how the military context cultivates resilience stating, “When you have to travel through every part of the training and the experiences and the things you encounter as a

Marine, that right there creates resilience in and of itself.” Charles recalled how resilience for him started with his training and became a part of how he dealt with adversity throughout his life:

We were taught in the military to meet stress head on, to go on the offensive. So, when I get stressed, I tend to rise up and meet it, try to take some control, not let it control me. Still live my life because I don't let it control me. In war you can't just quit, you have to keep going or you die so there really wasn't a choice. I guess that has carried over for me. There are times where I have thought about suicide, for the past 50 years I have had those thoughts, I have learned to attack the stressful and find ways to cope.

Bob shared how during Vietnam he learned to overcome adversity by being tested in challenging experiences:

I learned I could do anything I put my mind to. When you are in the Marine Corps and they, and you're in Vietnam and you're a young marine and uh you come in off a patrol and just so happens there was a little bit of firefight, a lot of the senior guys got wounded or killed and the next one you go out on your in charge of the communications squad. I'm now in charge in 7, 19, or 21 lives that's a big difference. And they trusted me enough to say go do it, just go do it and then I did. And then I learned that I could do it, so I just kept going along like that.

Yvette similarly described how the Marine Corps taught her to keep going no matter what explaining, “You can always find a way, and that was drummed into my head, but the way they did it, it was something I lived with for the rest of my life, and it has served me well, believe me.”

Resilience then was cultivated within the context of the military and became a part of each veteran's military identity. Participants described how the military trained them to deal with adversity such that they came to identify themselves as the type of people that could deal with adversity throughout the rest of their lives. For the women veterans, identifying as a woman in the military also cultivated resilience given the extra adversities they faced during service due to their gender.

Being a Woman in “a Man’s Military”. All of the women veterans described their time in service as having a valuable and positive impact on their lives. They served during different service eras and historical contexts, but all voiced they experienced discrimination during their time in service based on gender. Brianna explained how being a woman was a type of adversity given the military is a male dominated system, stating, “Yeah it was difficult being a woman Marine in a man's Marine Corps. I constantly got reminded of it being “a man's Marine Corps.” The women all recalled experiences of discrimination, especially when it came to men’s perceptions about women’s roles and capabilities. Mary shared how on her first day reporting to a new duty station the commanding officer, “Didn't stand up, I walked in and presented myself, stood at attention and he said ‘I told them I didn't want a damn woman!’, that was my welcome!” Margaret recounted a similar experience when starting a new job assignment stating, “Because of that sexist attitude. It’s like I couldn’t do anything right and I had just come off a job where I had gotten a personal decoration. I was made to feel dumb and I know I’m not dumb.”

Several women veterans also noted how there wasn’t a place for women, both metaphorically within the larger military system, and tangibly in the physical spaces they inhabited that were not designed for women. Margaret reflected on how women’s actions were controlled stating, “We were supposed to be ladies all the time. When I look back, I think it was a real way to keep us, keep us separate and keep us under the thumb of the powers that be.” Mary depicted a particularly painful event during her military career when she was passed up for her dream job of commanding women’s recruit training. She expressed anger that this happened just because she was an unmarried woman:

So, my case goes to the commandant of the Marine Corps and the first thing he asks the monitor is, “Is this the best candidate” and the monitor says “Yes” and then he asks “Is she married?” and the monitor says “No” and he says “Take her off the table.” I was so angry that simply because I was single...and the thing was my colonel monitor was

single, he had never been married, but no one was saying you can't give him a battalion command you know he's never been married, you know it would never have occurred to them with a guy.

Yvette remarked during the 1950s even finding a place to use the restroom was tough when you were woman. She explained when her unit of Women Reserves was activated during the Korean War, “They had to find a place for us to have a bathroom, this was a big thing, it was a man’s armory. I mean there was no place for women, they didn’t know what to do with us.”

Irene shared a similar experience in the 1990s when the Navy transitioned to allowing women to serve on ships and go out to sea:

We were in that transition period, where the guys were like “Well, if the girls are going to work on the ships, why are the girls not going out with us.” And of course, there was a problem there too, because the ships were only designed for men...they had no female products on board. A girl had her menstrual cycle or whatever and if you’re gone for three years you know that’s gonna happen. So, things weren’t designed for women to be on ships.

Despite these experiences, collectively the women all shared ways in which they demonstrated resilience and navigated being a woman in a man’s military. Participants recalled instances of proving themselves on the job. Mary recounted that after a less than warm welcome, she finally proved herself to the commanding officer:

Six months after I got there the inspector general team came in and I had been told all along we really have to do well because we did so poorly last time. And so, I mean I worked a lot of nights and I worked my clerks pretty hard and we squared away everything in the office. And we got an excellent and it was one of the few excellent that the squadron got and it was all on personnel and admin stuff. Well, he changed his tune after that, I was ok!

The women also described instances of having to stand up for themselves in stressful situations in the workplace when they felt they were not being treated equally. Irene recounted a time when she was assigned to give penicillin injections for sexually transmitted diseases to young sailors returning from overseas tours. She stated she would “get aggravated” when they tried to give her a “hard time” by making sexual advances and being inappropriate about where

she was going to place the injection. She stated she often had to respond back in turn saying “If that’s where you want it buddy, turn around...just try me.” Brianna expressed standing up for herself repeatedly over the years by having what she called “the talk” with male coworkers:

I always had to have "the talk" with these folks that weren't treating me professionally... after the gunny left, I noticed the Lieutenant Colonel he would just be so rude to me, he would just throw things on my desk. One day I just told him “Sir I really want to have a personal talk with you” and he said “yes”, we went in the conference room and I had to have that talk with him. I had to have that talk and I've been having these talks. I think that was the challenge of being a woman in the corps...he was professional and it got so much better, but again having to have that stamina and that endurance to be able to have, I used to call it “a talk” because that's what it boils down too.

As illustrated by the women veteran’ experiences, they faced gender discrimination during their time in the military as a specific form of adversity which they were challenged to overcome. Facing these adversities further developed their resilience. This had an impact on their military identity, seeing themselves as trained to deal with adversity because of the military, but also further steeped in dealing with gender discrimination as a result of serving in military as a patriarchal system. For all the participants, having a military identity served as a source of resilience as they aged.

Activating Their Military Identity. Veterans highlighted how their military identity served as a source of resilience they utilized in their everyday lives to deal with adversity. They noted the salience of their military identity during stressful times, seeing themselves as someone who was capable and had overcome adversity in the past. Many shared how stressful situations triggered their military identity activating the habit of dealing with adversity that helped them cope with stressful situations over the years. Some veterans spoke about how their military identity helped them overcome adversities specifically in their second careers. For instance, John described how he was able to win political races as an underdog and become a Senator at the age of 26 explaining, “I outworked them...I don’t think I could have done any of that without Parris

Island [Marine Corps bootcamp location]. There is no such thing as a former Marine they say.” Bob similarly mentioned a difficult time during his second career working at Marine Federal Credit Union when he was called upon to help a younger veteran. One of his coworkers called him in a panic after her husband came home from his third and last deployment to Iraq. He said he was able to help him explaining, “I told him about my experiences in Vietnam...and slowly but surely we talked.” He shared it was difficult for him to talk about his own experiences in Vietnam, but he invoked his military identity stating, “Once a Marine, always a Marine. You never quit. If you see something that needs to be taken care of you do what you can to help.”

Irene shared a story of how she drew upon her identity as a retired Navy Chief in her second career working at the VA to earn the respect of a supervisee who questioned her qualifications. She described after she assumed the role of Chief of Voluntary Services:

I had about a thousand volunteers that worked for me in various stages and one of the guys came in there one day right after I got there and he goes “You know I think the person that handles this job should be a retired person or somebody that served in the military that know what’s going on with the military and you don’t qualify for that position.” And I looked at him and I said “Well, are you going to the Memorial Day service in a couple days?” He goes “Yeah.” I said “Well, be there.” Well, I walked in with my dress blues with all my gold on my shoulders and he looked at me and said “I didn’t know you were a chief in the Navy!” I said “You never asked!”

One veteran described how her military identity helped her cope in later life with physical limitations impacting her participation in daily occupations. Yvette recalled how many of her family members want to do things for her on days when she experiences a lot of pain due to arthritis and angina. She explained she resists their help insisting she do things for herself joking, “I’m 89 years old and I’ve got my great grandchildren telling me ‘Well she’s a Marine, she’ll do it one way another!’” For Brianna, during stressful times in her life, and especially during the recent COVID-19 pandemic, she copes by invoking her military identity as a person who always stays physically active. She described:

Because I spent the majority of my adult years as a Marine and I value the physical fitness part of it, so I've learned not to ever lose that drive and desire to stay physically fit to this day, 15 years later I am meeting that requirement.

Veterans described how stressful situations throughout their lives invoked their military identity and the instilled habits of dealing with adversity that military culture had cultivated. Participants military identity then served as a resource for being resilient during challenging times such as dealing with stressful work situations or adapting to physical limitations in older age. Throughout their lives having a military identity served as valuable resource for veterans.

Discussion

Phase 2 of this study used life history interviews to explore and describe in depth older veterans' perceptions of their military experience, occupational participation, resilience, and successful aging. While the extant literature has focused mainly on quantitative examinations of older veterans and the negative effects of military service, this study sheds light on the positive long-term impact of military service through the inclusion of older veterans' qualitative perspectives. Three primary themes were identified through analysis that describe the older veteran's experiences and perspectives: (1) Family Ties, (2) Military Identity, and (3) Resilience. Findings highlighted the role of social bonds, military identity, and the process of resilience in understanding the impact of participation in military service on the life course. In this discussion I will integrate the findings within the existing literature and then conclude by discussing the limitations of this phase of the study.

Integration of Findings with Existing Knowledge

The first theme, family ties, described the importance of family connections to the veterans' military experiences. The finding that all participants had a family member who also served in the military was not surprising. Veterans are overwhelmingly more likely than members of the general public to have family connections to the military with 79% having an

immediate family member who served, and over 50% reporting a parent or grandparent who served (Pew Research Center, 2011). Several studies have shown the strong effect on enlistment of a family history of service (Manowski et al., 2015; Segal & Segal, 2004; Thompson, 2016). Despite noting this effect, research has not delved deeper into the influence of family connections.

A notable contribution of this study is highlighting *how* family connections were influential. Participants pointed to their families as a major source of information transmission regarding the values and norms of military culture. Additionally, they described how family members spoke about military experiences and expressed their own military identities via stories, songs, and objects. Participants experienced military culture vicariously through their family which influenced each of the veterans and their life choices. These early experiences help shed light on why many veterans from families with individuals who served then went on to serve themselves as well as how military culture can shape both individual and family identities over time and generations.

Participants also viewed those with whom they served as family and the military itself as a larger family. This finding aligns with research in both the aging and occupational science and occupational therapy literature (Brewster et al., 2020; Kirchen, 2013; Williams et al., 2018; Woodward & Jenkins, 2011). For instance, Woodward & Jenkins (2011) similarly found older veterans referred to those they served with as family and emphasized serving in the military as a collective not individual enterprise. Participants expressed the significance of strong emotional bonds and the camaraderie they experienced in military. Additionally, they described how these bonds last over time.

Other literature also supports the finding that these close bonds do not end when veterans leave the military. Older veterans express a desire to connect generally with other veterans in later life (Kirchen, 2013), as well as with those they served with and the larger military community (Brewster et al., 2020). Research has also demonstrated the role of military service organizations in facilitating and maintaining military connections for older veterans (Brewster et al., 2020; Burnell et al., 2010; Suter et al., 2006; Williams et al., 2018). Notably, this study extends this vein of literature by contributing insight into the role of social media, especially Facebook, in helping veterans maintain military connections over time. In this study social media played a central role in helping veterans maintain their military connections. This finding is important given older adulthood is a time in the life course associated with both increased social isolation and loneliness (Victor & Yang, 2010). Social media then could be a key way for older veterans to find a point of connection to other service members and veterans as resources with shared experiences. Interventions that focus on using social media to connect veterans to each other could be an important way to promote health and well-being through meaningful social participation.

The second theme, military identity, detailed how serving in the military, specifically the unique military cultures of Marine Corps and Navy as branches, significantly shaped veterans' identity. These findings are in line with research underlining the influence of military culture on veterans' identity (Adams et al., 2019; Adler & Castro, 2012; Atuel & Castro, 2018; Cogan, 2016; Hack et al., 2017). The findings from this study regarding military identity can be understood more in depth by drawing on theoretical understandings of identity, particularly Holland et al.'s (1998) sociocultural theory of identity. Sociocultural theories of identity highlight the role of culture in identity formation (Holland & Lachicotte, 2007). Culture is

understood as vital for constructing our own identities by providing the resources for identity formation as “Identities are social and cultural products through which a person identifies the self-in-activity and learns, through the mediation of cultural resources, to manage and organize himself or herself to act in the name of identity” (Holland & Lachicotte, 2007, p. 114). Without culture then, there would be no reference point for crafting our own identities.

The impact of military culture on veteran identity was expressed in a number of ways by participants. They first described how their identities were transformed during formative experiences at bootcamp or officer training school. Atuel & Castro (2018) detailed how military identities are constructed during basic training as veterans internalize military culture. They described a process of indoctrination as recruits realign their own identities with the values, beliefs, norms, and language of the military as a social group. Military culture and ways of doing and being became internalized for the veterans in this study. Many veterans noted how their military identity became more salient and dominant as they gained membership into the military as a social group. Identities then are constructed in part from the meanings and norms of the salient roles that we hold (Thoits, 2013). Thoits (2013) argued that while people have multiple identities, those that are more salient, such as military identity in this study, hold more subjective importance and value and therefore provide more meaning and guidance in life. This was evident in the ways participants described how they continued to value and express their military identity as a salient identity even after they left service.

This study also found that military identities were constructed on an ongoing basis in the participants lives. The situated and interactional accounts of military identity that emerged pointed to an understanding of identities as rooted in everyday ‘doing’ as participants expressed their military identities through participation in occupation. In their sociocultural theory on

identity, Holland et al. (1998) argue that to conceptualize identity, attention must be paid to how identity is situated, formed, and expressed through participation in everyday occupations. The authors situate identity in social practice, every day doing, by building upon sociocultural perspectives on identity that understand human behavior as mediated by identities. Identity from this perspective is understood as improvised in social interaction, in the flow of daily activities as each of us express to ourselves and each other who we are through doing.

Participants in this study provided many examples of how their military identities were expressed through participation in specific occupations within the military context such as specialized training and education, performances of professional expertise and skills, and participation in major military and historical events. Woodward & Jenkins (2011) also found older veterans expressed their military identities by recounting performances of specific military skills and expertise as well as participation in major military events. Kirchen (2013) likewise found when older veterans spoke about their time in service to other veterans, they repeatedly focused on what they did in the military. They shared their professional roles in the military, specifics of their job expertise, and where and when they served. Like the participants in this study, the older veterans in Kirchen's study described another expression of military identity by recalling participation in worldwide travel via frequent military deployments. Participants in both studies discussed learning to enjoy food from other cultures during their travels.

The interrelationships between occupation and identity have long been a prime focus of scholarship in the occupational science literature (Asaba & Jackson, 2011). Christiansen (1999) noted that throughout our lives the occupations in which we engage give meaning to our experiences and inform our identities. He suggested that through occupation we express who we are to others, reinforce how we see ourselves, and "create a sense of coherence or continuity over

time” (Christiansen, 1999, p. 589). Within occupational science there has been a healthy vein of scholarship focused on how humans construct dynamic identities through doing (Asaba & Jackson, 2011; Christiansen, 1999; Clark, 1993, Farias & Asaba, 2013; Huot & Laliberte-Rudman, 2010; Kielhofner, 2002; Laliberte-Rudman, 2002; Taylor & Kay, 2015; Rowles, 2002; Phelan & Kinsella, 2009; Unruh 2004). This study adds to this scholarship by demonstrating how military identities are constructed, expressed, and negotiated through participation in occupation throughout the life course.

Cogan (2016) also focused on the relationship between military occupations and identity. She explored military identity using the concept of figured worlds to describe the process of transformation and identity construction when people join the military. Figured worlds are an important element of Holland et al.’s (1998) sociocultural theory of identity. They introduced the concept of a figured world to describe the dialectical relationship between culture and identity. A figured world is “A socially and culturally constructed realm of interpretation in which particular characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others.” (Holland et al., 1998, p. 52). Findings from this study regarding the salience of military identity and its continuity over time echo understandings described by Cogan (2016) who showed how the military as a figured world shapes the identities of those who participate in specific occupations within that sociocultural context as well as when they enter into other social contexts.

Within the figured world of the military, identity is enacted through participation in certain activities that are meaningful to that figured world. A novel contribution of this study is the inclusion of the perspectives of older female veterans that extends previous research focused on the construction and expressions of military identity. The female participants underscored

awareness of gender differences in the occupations they were able to participate in compared to the men. Their reflections on how being a woman barred them from participating in military occupations they considered the most meaningful to the figured world of the military, especially weapons training, sheds light on how gender identity intersects in dynamic ways with military identity. The military's emphasis on participation in traditionally domestic and feminine occupations did not align with the women's own ideas of themselves and the types of activities they felt were capable of participating in and meaningful expressions of a military identity.

This especially clashed with their identity as women who were different from other women of their generation because they joined the military. The women called attention to the ways they resisted and negotiated the military's ideas of how a woman in the military should be and act with their own views of themselves as women in the military. All of the women in this study noted in their present lives it was important for them to stay abreast of what was happening with the younger generations of women service members and veterans. More than half of the women participants also described becoming advocates for women in the military in their post-service lives highlighting how their own identity in later life was shaped by facing gender discrimination during their time in service. Waldrop (2016) similarly found that women veterans in her study joined the military so that they could more easily pursue opportunities for work that were outside the traditional realm of what society considered women's work. The women veterans in her study also voiced resentment and frustration with having to participate in occupations that demanded less than they felt they were capable of, such as different physical fitness requirements than the men.

Another finding of this study showed that military identity intersected and influenced other personal identities for all of the veterans, especially as they transitioned out of the figured

world of the military. Given we inhabit different social contexts throughout our life, and participate in different occupations, our identity then is multifaceted and always in process (Holland et al., 1998). This understanding of identity was reflected in participants descriptions of how they negotiated their military identities in their post-service lives as they transitioned social contexts from the military to the civilian world. Veterans described different reasons for leaving the military, but all noted ways their military identity influenced and at times conflicted with other personal identities such as being a mother, college student, or civilian worker in their post-service lives.

Within figured worlds, identity is also relational and positional in terms of one's social position relative to other members (Holland et al., 1998). In the military social positions are designated through the chain of command which is a power structure where each service member is situated relative to others (Atuel & Castro, 2018). One's positional identity in the military is clearly designated to oneself and others through this hierarchy that consists of labels such as rank, nicknames for specific positions, military branch, and job title (Cogan, 2016). For example, in the Marines Corps "a grunt" is a term used to describe infantrymen who hold a certain position within the figured world of the military as the Marines who serve and fight on the frontlines. Within the figured world of the military positional identities and social relationships then are highly structured. Moving from this highly structured figured world where a service member's positional identity is clearly demarcated, to the civilian world where they felt like outsiders, proved challenging for the participants in this study. Williams et al. (2018) also provided an example of how retirement from the military challenged the identity of veterans. Participants in their study described experiencing losing a sense of belonging, professional status, and objects that symbolized their military identity such as uniforms and badges. Similar to

the veterans in this study, they also noted the desire to be around others who understood military culture and having to negotiate challenges to their military identity when entering into work in the civilian world.

This study also showed the ways veterans constructed some degree of military identity continuity in their post-service lives. Previous research has also shown that older veterans actively find ways to reconstruct and express their military identity in their post-military lives (Adams et al., 2019; Kirchen, 2013; Williams et al., 2018; Woodward & Jenkins, 2018). Several studies report that veterans do this by spending time with other veterans (Williams et al., 2018; Woodward & Jenkins, 2011), talking about their military experiences with others who have served (Suter et al., 2006; Brewster et al., 2020), and serving others, especially other veterans (Katz, 2012; Kirchen, 2013). Serving others is considered a core value of military culture, as noted by the VA it is “Perhaps the most central value, being of service to others - measuring one's worth by how well one serves others selflessly” (U.S. Department of Veterans Affairs, 2020). Marine Corps culture further emphasizes this value stating in their leadership training guide, “There is almost nothing more precious to a Marine than a fellow Marine” (United States Marine Corps, 2014, p. 14). The findings from this study expand these understandings by showing how this value is embodied in a military identity and expressed through occupations that provide opportunities for veterans to serve others.

The findings from this study are also supported by Rudman's (2002) observations about the relationship between occupation and identity for older adults. She highlighted how occupation can become the medium through which core identities can be reconstructed and create a sense of continuity over time. This study highlights the temporal component of how veterans maintain their military identity and connection to the figured world of the military

through occupation over time. Although no longer in military service, participants in this study used occupations, such as working in jobs with a “military flavor” or serving other veterans and service members, as a means to continue to identify themselves as members of the extended military social network. Participation in these types of occupations enabled them to stay connected with military culture and other military service members and veterans. This allowed them to maintain their military identity and experience a sense of continuity of identity that was personally meaningful and valued. These findings shed light on the importance of interventions and services that focus on promoting health and well-being through participation in occupations that enable veterans to stay connected to the extended military social network as well as occupations that allow them to confirm and express their military identities.

The final theme of resilience demonstrated how the military is a unique cultural context that fosters resilience in those that serve. Veterans were trained in the Marine Corps and Navy to always be ready and prepared for the next mission. Even when not serving in combat, military service members are trained to be ready at all times and trained to overcome adversities, which is especially engrained in Marine Corps culture given their expeditionary mindset (Johnson, 2020). Part of a military identity then is seeing oneself as someone who has and can overcome adversity and was trained to deal with stressful situations. The veterans shared how the training they received in the military cultivated resilience as well as how their ability to overcome adversity continued after their time in service. These findings parallel prior research highlighting the role military culture plays in developing resilience in service members (Sinclair & Britt, 2013; Simmons & Yoder, 2013; Thomas & Taylor, 2015). The literature identifies the military as a unique cultural context that develops and sustains resilience (Adler, 2013). Resilience is considered an essential aspect of military training and readiness (Adler & Castro, 2013) since

service members are expected to be able to operate and be effective under extreme circumstances (McGarry et al., 2015).

The majority of the literature on resilience within the military cultural context to date has focused on the younger veterans from the wars in Iraq and Afghanistan (Simmons & Yoder, 2013). Findings from this study extend the small vein of work focused on resilience in older veterans. These studies found facing adversity in earlier life resulted in greater resilience for veterans in older age (Pietzrak & Cook, 2013; Monin et al., 2014). This study adds depth to understandings of older veterans' resilience by providing veterans' descriptions of how the military cultural context cultivated resilience through engagement in occupation, as well as how military identity served as a source of resilience in their post-military lives. Veterans from this study described the salience of their military identity during stressful times, viewing themselves as someone who was capable of overcoming adversities. A salient military identity then may play a role in resilience by serving as a protective factor for health and well-being as veteran's age. Military identity may be the missing piece in understanding why older veterans as a population have rated themselves as more resilient and aging more successfully than the general older adult population (Pietzrak & Cook, 2013; Pietzrak et al., 2014).

Interventions and services that foster resilience in older veterans by tapping into their military identity as a valuable resource may have the potential to promote the health and well-being of this population.

Additionally, to my knowledge, this is the first study to include older women veteran's perspectives to highlight how resilience in the older veteran population may vary by gender. The experiences of gender segregation and harassment, and ways the older women veterans navigated being in a male-dominated culture, are supported by earlier research examining the

experiences of older women veterans (Huynh-Hohbaum et al., 2003; Waldrop, 2016). The women veterans in this study described how identifying as a woman in the military also cultivated resilience in a unique way as they faced more adversity during service due to their gender. They all shared ways in which they demonstrated resilience and navigated the challenges of being a woman in a man's military. These findings highlight the ways discrimination within the military cultural context may foster resilience in minority groups such as women in unexpected ways. Minority veterans may see themselves as not only resilient because of their military identity, but even more resilient given they have faced the adversities of serving in a system that is dominated by white, male norms. This focus on the possible strengths of minority groups, such as resilience, is important given most research with these groups in the military has taken a deficit focused approach highlighting risks to their health and well-being. While this is undoubtedly important, the findings from this study support a strengths-based approach to interventions and services aimed at meeting the unique needs of minority groups in the military.

Limitations

Although this phase of the study makes a significant contribution to the body of literature focused on older veterans, it does come with some recognizable limitations. First, the use of convenience and snowball sampling methods may have restricted participation to older veterans who are particularly interested in sharing their military experiences, identify more strongly with being a veteran, and have more positive views of the impact of the military on their lives. This means that only one type of perspective was represented in this study. Therefore, those veterans who do not strongly identify with being a veteran or have negative views of the military due to their experiences in service might have been left out of this study's sample. This could especially pertain to minority veterans given the military is still a predominantly white and male institution.

Snowball sampling during COVID-19 also led to a mainly homogenous sample in terms of branches of the military represented. As previously noted, the veterans who participated in the interviews represented mainly the Marine Corps and two from the Navy. The findings on military identity present a view of military culture and identity that are specific to these branches, which are considered “sister services” (Johnson, 2020). The findings from this study and their implications are limited then as they only represent one perspective among many. Future research is needed to capture the varied perspectives that were not captured in this study due to the small and homogenous sample in terms of size and demographic features. This also limits the ability to map the experiences of one branch of military service to the next as each has its own unique culture within the larger military culture. Future studies could be strengthened by recruiting a more diverse sample both in terms of demographics and military demographics. This would ensure that more than just a positive view of the long-term impact of the military would be represented in research. The addition of female older veterans’ perspectives in this study is a notable contribution to the literature given how few studies have focused on this subgroup of the overall older veteran population. Also, due to study modifications in response to COVID-19 (e.g., conducting interviews via videoconference, resulted in few opportunities to observe participants, and conducting only one interview per participant) may have limited the depth of understanding reached.

CHAPTER 7: INTEGRATED DISCUSSION & CONCLUSION

The purpose of this study was to explore the relationships between military service, occupational participation, resilience, and successful aging for older U.S. military veterans. The findings from the two phases of this study are integrated into the current chapter discussion. First, I describe the integration strategies used to merge the two phases of this study and detail how they were utilized to interpret the depth and breadth of the inter-related data. I then discuss the ways the integrated findings of this study address existing gaps in the literature base. Finally, I conclude this chapter with implications for future research and clinical practice.

Integration of Quantitative Results and Qualitative Findings

Sequential Explanatory Design

For this study, a sequential explanatory design was used to answer the research question through implementation of two connected phases of data collection, first quantitative surveys and then follow-up qualitative interviews. A main reason for choosing this design was to not only obtain quantitative results, but to be able to explain such results in more detail using the qualitative findings (Creswell & Clark, 2011). This is true especially when participant perspectives are able to shed light on the mechanisms behind the trends seen in quantitative results. As noted in the literature review of this study (see Ch.2), research has shown that older veterans rate themselves as resilient, aging successfully, and report positive perceptions of their time in service (Pietzrak et al., 2014; Pietzrak & Cook, 2013; Settersen, 2006). The mechanisms behind these trends though have not been well understood.

In this study, the quantitative phase was used to identify broad patterns across the group of older veterans. Results showed occupational participation, and specifically social participation, may foster resilience among older veterans. Quantitative results also indicate that older female veterans may be aging more successful than their male counterparts. In addition, this study substantiates prior evidence that older veterans tend to appraise their military experience as positive despite exposure to combat and aging with service-connected disabilities. Following up on the quantitative phase, the qualitative phase then shed light on the mechanisms behind the broad patterns identified by the quantitative results. Findings from the qualitative phase highlighted the positive long-term impact of military service through the inclusion of older veterans' first-person perspectives. Three primary themes were identified: (1) Family Ties, (2) Military Identity, and (3) Resilience. Findings showcased the role of social bonds, the salience of military identity, and the process of resilience in understanding the impact of participation in military service on the life course (see Table 10).

Table 10*Summary of Key Findings from Two Phases of Study*

	Quantitative Survey Analysis (Phase 1)	Life History Interviews Analysis (Phase 2)
Relationships Between Military Service, Occupation, Resilience, & Successful Aging	<ul style="list-style-type: none"> • Positive association between occupational participation and resilience • Social activities rated among most frequent and meaningful • Older women veterans had higher levels of successful aging than males • Majority of sample appraised military service as having a positive impact on their lives • Older veterans in this sample did not have significantly higher resilience scores than civilian counterparts 	<ul style="list-style-type: none"> • Family Ties <ul style="list-style-type: none"> ▪ Family military history and culture ▪ The military as family ▪ Maintaining military connections • Military Identity <ul style="list-style-type: none"> ▪ Military identity salience ▪ Expressions of military identity ▪ Post-service identity negotiation • Resilience <ul style="list-style-type: none"> ▪ Cultivating resilience ▪ Being a woman in a man's military ▪ Activating military identity

Integration Strategies

One of the general goals of mixed methods research is the integration of two different sources of data within the same study to gain increased understanding of complex social phenomena (Johnson et al., 2007). The process of integration though has been noted as the largest challenge for mixed methods researchers as there are no set strategies that are considered the gold standard. Guided by the mixed methods integration recommendations of Bazeley (2018) and Liebner & Weisner (2010), the following two strategies were used to meaningfully integrate the two sources of data within this study: (1) sequential expansion of quantitative results with qualitative findings, and (2) exploring dissonance and divergence between the two data sets.

Sequential Expansion. In sequential mixed methods designs data are gathered sequentially with analysis of the data from the first phase informing the subsequent phase of data collection (Liebner & Weisner, 2010). It is the intention of this type of design for the follow-up

phase to add detail and help extend the results obtained in the first phase. Sequential expansion then is an integration strategy used for sequential designs as a way to expand upon understandings gained through the initial phase of data collection (Bazeley, 2018). For this study, new information from the qualitative life history interviews is integrated with results of the initial quantitative surveys to produce a coordinated and expanded set of understandings for the study as a whole (see Table 11).

Table 11

Sequential Expansion: Interpretations of Coordinated Results

Quantitative Result	Qualitative Explanation	Integrated Understanding
Positive association found between occupation and resilience	<ul style="list-style-type: none"> • focus on social participation highlighted by veterans • valued staying busy 	<ul style="list-style-type: none"> • links between social participation and resilience • occupation how military identities expressed • military identity, social participation with other veterans and for others ways to continue expressing salient military identity • military identity as a protective factor and source of resilience
Older veterans in this sample had higher levels of occupational participation than civilian counterparts	<ul style="list-style-type: none"> • veterans noted the importance of staying busy • military cultural values of routine and structure 	<ul style="list-style-type: none"> • possible enduring impact of military culture and values • structured way of life, sense of purpose, routine, and staying busy
Social activities rated among most frequent and meaningful	<ul style="list-style-type: none"> • role of social media in connecting with other veterans • military cultural values of camaraderie, teamwork, serving others • lasting social connections • extended military family • staying connected to other veterans 	<ul style="list-style-type: none"> • possible enduring impact of military culture • military as family, enduring social bonds, need to connect with other veterans • social activities with and serving other veterans reflect their military identity, salient and meaningful even in older adulthood, maybe especially in older adulthood as they face age related changes

Quantitative Result	Qualitative Explanation	Integrated Understanding
Older women veterans had higher levels of successful aging than males	<ul style="list-style-type: none"> • opportunities for education and advancement • opportunities to do something different than the norm • resilience • women military identity 	<ul style="list-style-type: none"> • historical context of women serving, going against the grain • made the most of opportunities that had an impact on the rest of their lives • educational and occupational attainment protective factors for aging well
Majority of sample appraised military service as having a positive impact on their lives	<ul style="list-style-type: none"> • opportunities • advancement • exposure • resilience • salient military identity • lasting social connections 	<ul style="list-style-type: none"> • many factors had a positive impact on veterans' life course • salience of military identity as a resource for resilience
Older veterans in this sample did not have higher resilience scores than civilian counterparts	<ul style="list-style-type: none"> • contrary findings, veterans described themselves as very resilient 	<ul style="list-style-type: none"> • need for first person perspectives regarding resilience processes • role of context in cultivating resilience

Sequential expansion was used to help better explain the quantitative results by adding explanatory detail from the qualitative findings. For the purposes of integration, I will discuss the quantitative results again briefly and elaborate on how findings from the qualitative phase help expand upon these results. Findings from the quantitative phase indicated that older veterans who more frequently participated in meaningful occupations rated themselves as more resilient. The older veterans in this study also had significantly higher levels of occupational participation than their civilian counterparts. Frequency scores on the MAPA highlight that of the spectrum of activities veterans reported participating in, social activities had some of the highest levels of participation in a one-week period. Over 60% of the sample reported participation in using the computer for email, talking on the phone, socializing, and helping others as among the most frequent and meaningful activities they engaged in during the week.

This suggests that participating in activities that enable social connectedness promotes a sense of meaningfulness in the older veterans' daily lives. In their study Pietzrak & Cook (2013) also found that social engagement was associated with resilience. They assessed social engagement by asking participants to report how many times per week they visit with family and friends. Results from the present study expand upon this finding by including other meaningful activities that older veterans reported participating in during the week that connected them with others.

Findings from the qualitative phase of the study help to bring more into focus the relationships between occupation, social participation, and resilience for older veterans. The lasting impact of military culture and values became clear in the ways participants discussed the importance of staying busy and the value they placed on structure and routine in their daily lives. Interviews further highlighted the importance of social participation. For the participants of this study, participation in social occupations included not only those that connected them with family and friends, but the occupations that connected them with other veterans and service members were often considered the most meaningful. All of the veterans participated in occupations that kept them connected with military culture, other veterans and service members, and the extended armed forces context. While the MAPA showed that computer use and computer use for email were frequent and valued occupations for the participants, the follow up interview shed light on *how* the older veterans were using the computer in ways that connected them to other veterans through social media. By participating in these occupations, they continued expressing their military identity by staying connected with this cultural group. In older adulthood their military identities remained salient and importantly served as a source of

resilience. Staying connected with the extended military network continued to activate their military identity which in turn served as a source of resilience in their daily lives.

Prior work in the occupational science and therapy literature has established the importance of social participation for older adults (Fischl et al., 2017; Lood et al., 2017; Smallfield & Molitor, 2018; Wright St. Clair, 2012). Kirchen (2013) found that for older veterans, lack of social participation contributed to feelings of loneliness and life dissatisfaction. Life course and gerontology scholars have similarly noted the importance of social connectedness for older veterans (Fogle et al. 2020), and have pointed out that social connectedness is linked to resilience for this population (Fanning & Pietzrak, 2013; Weiner et al., 2016). Further exploration of the relationship between social participation and resilience for older veterans is important given older veterans have smaller social networks than their civilian peers (Monin et al., 2014) and report feeling of loneliness (Kuwert et al., 2014; Wilson & Kiernan, 2018). This means that older veterans may be more at risk for social isolation and loneliness which has been associated with adverse consequences to the health and well-being of older adults (Donovan & Blazer, 2020). To combat this risk, there is a need to know more about how social participation is linked to resilience in this population and what types of social participation promote resilience in older veterans.

This study also found a relationship between gender and successful aging for older veterans with the female veterans demonstrating higher rates of successful aging. In their interviews, female veterans highlighted the ways they made the most of joining the military which provided them with different life trajectories as women than they would have had otherwise. They credited the military with providing them opportunities for education and training that were out of their reach as women living in certain historical and societal contexts.

They made the most of these opportunities and this educational and occupational attainment may have served as protective factors for successful aging.

Additionally, serving in a male dominated institution cultivated resilience in the women veterans as they navigated being a woman in a man's military. This further development of their resilience may also serve as a protective factor for successful aging.

Quantitative results also showed that the majority of the older veterans appraised their military service as having a positive impact on their lives. Interviews brought to light the many advantages the veterans ascribed to serving in the military such as opportunities for training, education and advancement, exposure to different cultures, people and ways of life, development of leadership skills, and cultivating resilience. Positive long-term influences on veterans' lives included salient military identities which served as a resource for resilience during adverse times, and enduring social connections to the extended armed forces context. Finally, in contrast to previous work, older veterans in this study did not have higher resilience scores than their civilian counterparts. The findings from the interviews though do not match up with the quantitative results. First person perspectives revealed participants did consider themselves resilient and credited their military training with cultivating this capacity for resilience. This contrary finding will be explored more in the next section focused on dissonance and divergence.

Dissonance and Divergence. While the general goal of mixed methods research is to integrate different data sources to gain a deeper understanding of complex social phenomena, there are inevitably times when the different sources of data produce conflicting information. Instead of viewing this conflicting information as a problem to be avoided or explained away, Bazeley (2018) argued cases of dissonance and divergence should be welcomed by mixed methods researchers for their capacity to initiate creative insights. Dissonance and divergence

then refer to the ways the findings of different data sets in mixed methods studies can be at odds with one another.

Dissonance is often encountered in studies that use complementary methods that seek convergence in their results (Bazeley, 2018). That was the case in this study where two main points of dissonance occurred between the results of the quantitative and qualitative methods used to examine the constructs of resilience and successful aging (see Table 12).

Table 12

Cases of Dissonance

Construct	Quantitative Measure	Quantitative Results	Qualitative Measure	Qualitative Findings
Resilience	Connor Davidson Resilience Scale (CD-RSIC10)	participants did not have higher levels of resilience than civilians in other studies	Life-History Calendar Interview	participants described themselves as resilient and credited military with cultivating resilience
Successful Aging	Successful Aging Scale (SAS)	distribution of sample into three groups (low, average, high)	Life-History Calendar Interview	no major differences found between three groups

The first case of dissonance was found between the quantitative and qualitative measures of resilience in this study. While the quantitative results showed participants did not have higher levels of resilience than civilian older adults, qualitative findings revealed participants did consider themselves resilient and credited with the military with cultivating their resilience. As noted in Ch. 6, other work has reported higher levels of resilience among older veterans compared to older civilian adults (Pietzrak et al. 2013; Fogle et al. 2020). These previous studies also used the CD-RISC10 to measure resilience, which has been deemed psychometrically robust (Campbell-Sills & Stein, 2007). The dissonance between the qualitative and quantitative findings in this study may be due to the difficulty of measuring resilience and support the use of mixed

methods. Although scales have been developed to measure resilience quantitatively, there is still no gold standard for measuring resilience and no agreed upon definition of the construct (Windle et al., 2011). The dissonant results of this study may also point to the inadequacy of capturing resilience with measures that only focus on the level of the individual. Just because the veterans in this sample did not quantitatively score higher on the resilience measure does not mean they aren't resilient. Findings from the qualitative interviews support a more nuanced conceptualization of resilience that goes beyond solely focusing on individual measures. In particular, veterans highlighted the ways resilience is a process that is influenced by a combination of cultural, environmental, social, and individual level factors and resources. For example, veterans shared how the military context itself provided them with training and experiences that cultivated resilience and how this became part of veterans' military identities which served as a protective resource throughout their lives.

Qualitative findings from this study also support a conceptualization of resilience that views resilience not as an exceptional process, but instead as a norm for all human beings. Indeed, resilience scholars have argued that resilience is open to everyone and all older adults have the possibility of developing resilience (Harris, 2008; Masten, 2001). Instead of being seen as exclusionary and exceptional, resilience can be understood as universal and part of the everyday lives of humans who adapt to adversity throughout their life course (Bonnano, 2004). Findings from this study support the notion that resilience is cumulative (Browne-Yung et al., 2017; Wild, 2013), and a dynamic process that is honed over the life course (MacLeod et al., 2016). The older veterans in this study confirmed this as they called attention to how they developed resilience during their time in military service and how their military identity served as a source of resilience they utilized in their everyday lives.

A more nuanced conceptualization of resilience then could provide “greater opportunity to acknowledge the ways that older people thrive in spite of and even at times because they experience difficulties” (Wild, 2013, p. 142). This understanding of resilience does not detract from its conceptual power to capture how humans negotiate and adapt to adverse events in their daily lives. Instead, Bonanno (2004) pointed out that there are multiple pathways to resilience which is supported by the findings of this study.

Another point of dissonance for this study was the lack of differences found between the three groups (low, average, high) of participants that were grouped based on their scores of successful aging. The original design of this study was to be able to compare across these three groups to draw some insights regarding how successful aging differs among older veterans. While quantitatively there were differences between the groups in terms of their successful aging scores, in the follow up qualitative interview no meaningful differences were found between the groups in terms of successful aging. Similar to the case of resilience, this case of dissonance may also be partly explained by the difficulty of conceptualizing and measuring successful aging (Martinson & Berridge, 2015). It could be the case that participants conceptualized successful aging differently from the conceptualizations that guided the design and methods used in this study. The qualitative methods used in this study may also not have been sensitive enough to pick up on the variation between the participants in the three successful aging groups. This case of dissonance could also be a result of the overall homogenous sample of veterans.

Along with the two cases of dissonance noted, I also explored the divergent cases in this study. Bazeley (2018) explained that exploration of divergent cases is often unplanned in research, but when certain cases stand out it can be seen as an opportunity to “unlock” further analysis.

In this study, exploring divergent cases took the form of purposefully oversampling the older women veterans as a minority group for follow-up interviews to gain more insight by focusing on their perspectives. While not originally planned, I made the decision to focus on the women veterans' perspectives as a counter to dominant male veteran perspectives regarding the long-term impact of military service on the life course. Exploration of the women's perspectives revealed gender differences in terms of the processes of occupational participation, resilience, and military identity.

The divergent cases in this study were used to challenge taken for granted assumptions and norms as the women's interviews revealed tensions, ambiguities, and meaningful experiences that did not show up in the men's interviews. For example, the women described having to face gender discrimination which cultivated resilience in a unique way. This ambiguity challenged me to develop new understandings and I considered more deeply the women's experiences and how gender intersected with military service to shape veterans' lives over time. One of the main advantages of attuning to dissonance and divergence in mixed methods research is how exploring these cases can lead to important next steps for research and inquiry. In the next section I point out the ways this study addressed existing gaps in the literature base and how contributions from the findings of this study point to future avenues of exploration and investigation.

Addressing the Research Gaps

In Chapter 2 of this study, I identified a number of research gaps in the existing literature that informed the central research question and design of this study. In this section I will reintroduce the main gaps I originally noted and discuss how the integrated findings of this study contribute to addressing these gaps (see Table 13).

Table 13*Addressing the Research Gaps*

Research Gaps	Study Contributions
Segments of the veteran population	<ul style="list-style-type: none"> • focus on older veterans • Vietnam Veteran cohort • women veterans' perspectives
Positive long-term outcomes of military service	<ul style="list-style-type: none"> • evidence of positive long-term impact of military service • veterans had positive perceptions of their time in service despite some negative experiences and aging with disabilities • military identity and resilience protective factors for aging well
Factors that promote resilience and successful aging for older veterans	<ul style="list-style-type: none"> • evidence of the relationship between occupation and resilience • role of social participation with other veterans and extended armed forces network • role of military identity contributing to resilience and as a protective factor
Integrated understandings of the relationships between military service, occupation, resilience, and successful aging	<ul style="list-style-type: none"> • enduring impact of military culture on veteran's lives • temporal connections between past and present occupations • resilience cultivated through military context • resilience cumulative and always in process • role of identity and identity continuity through occupation in older adulthood
Mixed methods research examining occupation, resilience, and successful aging	<ul style="list-style-type: none"> • more nuanced understanding of occupation and resilience as a cumulative process • first person perspectives shed light on relationships between occupation, resilience and successful aging

Understudied Segments of the Veteran Population

Older U.S. military veterans are an understudied segment of the aging population in both the aging and life course literature as well as in the occupation-based literature. The findings from this study contribute to addressing that gap by focusing specifically on older veterans as occupational beings and the relationships between military service, occupation, resilience, and successful aging for this population. This study also makes a valuable contribution by highlighting the perspectives of Vietnam veterans and women veterans as unique subgroups of

the overall older veteran population. As I noted in Chapters 1 & 2, much of what is currently known regarding the long-term impact of military service is based upon studies which only focused on white male cohorts that served in World War II and the Korean War. The historical and societal contexts of both World War II and Korea were vastly different from the divisive and controversial Vietnam War. The Vietnam veterans in this study described how although they were the last of the draft era, many felt criticized for fighting and received a much more negative homecoming than veterans of other wars. Women veterans also described the adversity they negotiated being women in the military and how this impacted their lives in the long run. Findings from this study then elucidated how military service and its long-term impact vary based on service experiences including historical service context, veteran cohort era, and gender.

Positive Long-Term Outcomes of Military Service

The veterans in this study had positive perceptions of the long-term impact of military service despite noting negative experiences, serving in combat, and aging with service-related disabilities. Importantly, this study focused on older veterans still living in the community. To date, most studies with older veterans have an overrepresentation of veterans utilizing VA healthcare services and programs as well as those living in VA long-term care facilities. Dominant understandings of the long-term impact of military service then have been based upon veterans who have sought out healthcare services from the VA. Extrapolating from these veterans to the entire older veteran population may have resulted in an overly negative portrayal of the long-term impact of military service that fails to capture the positive effects of service on health and well-being across the life course. This study adds to the scholarship focused on recognizing the profound positive impacts of military service on the lives of veterans. The findings from this study provide evidence that serving in the military does have long-term positive outcomes for

older veteran that include long term social connection with other veterans and the extended armed forces network, as well as military identity and resilience as resources that promote health and well-being in older adulthood.

Factors That Promote Resilience and Successful Aging for Older Veterans

While prior work has shown that older veterans consider themselves resilient and aging successfully (see Chapter 2), the factors behind these patterns have not been well understood. The findings from this study illuminate particular factors that promote resilience and successful aging for older veterans. First, this study called attention to the positive relationship between participation in occupation and resilience for older veterans. Participation in occupations that connected older veterans with others veterans, the extended armed forces network, and those that allowed them to continue to express their military identity were among the most valued in older adulthood. Participating in these types of occupations enabled a sense of social connectedness and activation of salient military identity that served as protective factors for resilience and aging well.

Secondly, this study contributes to understanding how a salient military identity may play a role in resilience by serving as a protective factor for health and well-being as veteran's age. Having a strong military identity, seeing oneself as someone who was trained to be resilient, may serve as a potentially protective factor for this population. Military identity may be the missing piece in understanding why older veterans as a population have rated themselves as more resilient and aging more successfully than the general older adult population. These findings help to fill the gap regarding what factors promote resilience and successful aging for older veterans. This is important as veterans may be more at risk for social isolation in older adulthood as opportunities for social participation with other veterans may be fewer as these social networks

may be smaller (Brewster et al., 2020). Staying connected with other veterans was highly valued by the participants in this study, but there may be less opportunities for this form of social participation. This study showed the role of technology though, and especially how social media could be capitalized on to help maintain these connections and promote meaningful social participation for this group.

Integrated Understandings of the Relationships Between Military Service, Occupation, Resilience, and Successful Aging

Research on older U.S. military veterans' (see Chapter 1 & 2) points to the need for a more dynamic approach to understanding the multifaceted nature of military service, its full range of potential outcomes, and the factors that promote veterans' health and well-being as they age. Findings from this study add to an integrated understanding of the relationships between military service, occupational participation, resilience and the successful aging and illustrate how the effects of military service unfold across the life course.

Long-Term Impact of Military Culture. Findings from this study point to the enduring impact of military culture and the military as a figured world on the lives of older veterans. The military was described as an influential cultural context with its own language, code of manners, norms of behavior, belief systems, dress, and rituals (Reger et al., 2008). The military as a cultural context also served as a cultural group that provided veterans with identities (Atuel & Castro, 2018). Military values and culture were incorporated into each participant's military identity which provided the older veterans with a source of meaning. The veterans emphasized that one main cultural value incorporated into their military identity was strong emotional bonds with other veterans and service members. This makes sense as military culture emphasizes group

cohesion and a collective identity which connects service members to others in this group through camaraderie and group cohesiveness (Krueger, 2000).

This cultural emphasis on camaraderie is what makes veterans see other veterans and their fellow service members “like family” given the strong emotional bonds associated with military service. As noted by the veterans in this study, these strong emotional bonds do not end after their time in service. Veterans highlighted the importance of staying connected to ex-service colleagues and the larger military as an imagined family in their post-service lives. Another cultural value that the veterans discussed was resilience. The military cultural context itself values and cultivates resilience through training and this value then becomes part of a military identity. Veterans described how part of their military identity was seeing themselves as someone who is trained to be resilient and able to overcome adversity. The concept of a military identity for the veterans in this study related to the idea that joining the military and serving in this cultural context was a transformative experience that fundamentally changed a person and had a lasting impact on their identity

Temporal Connections Between Identity and Occupation. The findings of this study support the conceptualization of identity as an active process involving humans and their sociocultural contexts where identities are enacted, negotiated and expressed through occupation (Asaba & Jackson, 2011). This study paid attention to the military as a cultural context that shapes identities and the reciprocal relationship between participation in specific occupations and expressing a military identity. Findings from this study point to importance of occupations as the sights of identity construction and expression (Christiansen, 1999) and provide evidence that military identity is not monolithic, but instead varies based on each veteran’s military experiences and other identities. Participants gave examples of how their military identity was in

conflict with other identities, but they also described how their military identity often took precedence, influenced their other identities, and remained salient in their lives. It is likely that their military identity was more salient given the internalization of military culture that the participants described. In turn, the salience of their military identity meant there was more likelihood that this identity would be activated and expressed over time.

Occupations served as a source for maintaining aspects of a military identity for the veterans by connecting their past, present, and future. The veterans' stories elaborated on temporal understandings of occupation, by showing how past and present occupations are connected through identity continuity. This study highlights the temporal component of how veterans maintain their military identity and connection to the figured world of the military through occupation over time. Although no longer in military service, participants used occupations, such as working in jobs with a "military flavor" or serving other veterans and service members, as a means to connect with the extended military network. Participation in these types of occupations enabled them to stay connected with military culture and other military service members and veterans. Occupation then provided the mechanism for maintaining military identities over time as the veterans tapped into their past military experiences in the present. This allowed them to maintain their military identity and experience a sense of continuity of identity that was personally meaningful and valued.

Identity, Meaning, and Successful Aging. One of the key ways occupation has been understood to be related to health and well-being is through the relationship between occupation and identity (Christiansen, 1999). In older age, occupation has been linked to aging well as an expression of identity (Rowles & Ravdal, 2002; Laliberte-Rudman, 2002; Wright-St Clair, 2012). The meaning that individuals attribute to what they do then has an impact on their identity and in

turn their health and well-being (Huot & Rudman, 2010). For the participants in this study, identity was a shifting form of meaning making that happened as they participated in meaningful occupations. Findings showed it was meaningful to engage in occupations that connected veterans with other service members and veterans, and those that allowed them to continue to express their military identity. These findings show that participation in particular occupations that are the most meaningful for older veterans may be those that hold the most potential to promote aging well.

This emphasis on social participation and connecting with others points to the ways identity shapes and is shaped by our relationships with others. The veterans pointed out how meaningful it was for them to be part of the larger military family and forge and maintain connections to this social network. Military culture and training instill a sense of belonging to this group and veterans want to continue to identify and belong even after their time in service. Occupation served as the site of connection through which they experienced a sense of belonging and connection to the military. Given older age is a time where veterans may experience more social isolation and loneliness (Brewster et al., 2020), staying connected and feeling a sense of belonging to the military may fill a need that promotes veterans' health and well-being.

Mixed Methods Research Examining Occupation, Resilience, and Successful Aging

This study contributes to the growing vein of scholarship in occupational science using mixed methods to study occupation as a complex social phenomenon and to capture the tacit nature of occupational participation (Heatwole Shank, 2013; Huot & Laliberte Rudman, 2015). This study used an innovative sequential explanatory design to capture the complex nature of the occupational experiences of older U.S. military veterans, and how these experiences influence their health and well-being in older adulthood. Use of both quantitative survey measures and the

qualitative life history calendar interview method provided a more nuanced methodological approach to study the relationship between occupation and health and well-being as well as capture the contextual and temporal connections between past, present, and future occupational participation. Additionally, use of the transformative paradigm for mixed methods and the focus on women veterans in this study contribute to the growing scholarship in occupational science focused on addressing issues of social justice.

Within the aging and life course scholarship, this study contributes the use of both objective and subjective measures of resilience and successful aging for older adults. Mixed methods in this study provided greater depth and breadth regarding the long-term outcomes of military service on the aging of older veterans than one method alone could have provided. This study adds to scholarship using mixed methods measures to capture resilience as a dynamic and adaptive process. In addition, the use of mixed methods in this study allowed for the inclusion of more diverse perspectives and voices to be highlighted. To date, most studies with aging veterans have used quantitative methods and longitudinal studies pulling from large data bases of veterans using VA services. In-depth qualitative data from the life history interviews amplified the voices of older veterans and the diversity in their experiences that were used to supplement larger patterns and correlations shown in the quantitative analyses.

Implications for Future Research and Practice

A fundamental belief of the discipline of occupational science is that participation in occupation is directly linked with health and well-being (Wilcock, 1999; Yerxa et al. 1989). Findings from this study expand the knowledge of occupation by contributing to the dearth of literature focused on older U.S. military veterans as occupational beings, occupational participation during military service and its long-term impact on health and well-being, as well

as the relationship between occupation, resilience, and aging well. The findings from this study foster further understanding regarding the fundamental nature of occupation relative to health and well-being by providing evidence of: (1) occupation as a potential protective factor for promoting resilience, (2) the relationship between occupation and identity for older veterans that has an impact on their health and well-being, and (3) how occupation and resilience are related to aging well. Future work in occupational science should further explore how resilience and occupation are related, the role of identity continuity through occupational participation for older adults as a resource for resilience and aging well, and the unique occupational experiences of older veterans and especially minority veterans. It would also be interesting to further explore the role of social media as a form of social participation that promotes social connections for this population.

The findings of the current project as a whole also point to a number of implications for future interdisciplinary research focused on older adults and older veterans. Health is imperative and relevant for all older adults, giving occupational science an inroad to existing interdisciplinary discussions and research, while at the same time providing the space to contribute a novel perspective focused on occupation and health. This study demonstrates how an occupational perspective can shed light on the positive long-term outcomes of military service and the importance of participation in occupation, specifically social participation, for the health and well-being of older veterans. Additionally, this study sheds light on the relationship between occupation and resilience. Resilience is a concept receiving increased attention in the medical and social sciences given its association with improved health and well-being. Further occupational science research has much to contribute to interdisciplinary scholarship on resilience by understanding how resilience is cultivated and sustained through participation in

occupation. Future research should further investigate the relationships between occupation and resilience, explore what forms of social participation are more meaningful to older veterans, and what interventions and services for increasing social participation are most effective for improving meaningful participation and health and well-being.

The results of this study also have implications for occupational therapy practitioners. These include: (1) The need for strengths-based approaches when working with older veterans, (2) Military identity as a resource for resilience in older adulthood, and (3) The need for interventions that target social connection and identity continuity to promote the resilience and successful aging of older veterans through participation in occupation. Across all practice settings, occupational therapists interact with clients and families who experience adverse events. Occupational therapy then, with its focus on participation and understanding of the transactional relationships between person, occupation and context, may be uniquely suited to enhance resilience. Resilience is especially salient to older adulthood due to the significant changes and challenges associated with this period in the life course. Occupational therapists are trained to assess environmental contexts, performance patterns, skills, and task-demands to ultimately determine the “just-right challenge” for clients. With this training and background, occupational therapists are well positioned to enhance resilience by focusing not only on the individual, but also their social and physical contexts. Occupational therapists can employ a strengths-based approach when working with older veterans by shifting focus away from deficits and the negative impacts of military service towards client-centered and occupation-based practice that helps clients recognize and leverage their own unique strengths and capacities. For older veterans, therapists can focus on enhancing resilience through supportive social contexts. Occupational therapists can promote the health and well-being of older veterans by utilizing

interventions that tap into military identity, the capacity for resilience, and meaningful social participation.

Conclusion

This study as a whole represents significant progress toward development of a deeper understanding of the relationships between military service, occupation, resilience, and successful aging for older U.S. military veterans. Broadly, this study contributes an occupational perspective to understanding the long-term impact of military service on the health and well-being of older veterans. Findings showcased the role of occupation, social bonds, the salience of military identity, and the process of resilience in understanding the impact of military service on the life course. Integrated findings contribute to the scant literature on the occupations of older U.S. military veterans as occupational beings and can inform future research and interventions aimed at enhancing the occupational participation, resilience, and successful aging of this population.

APPENDIX A: SEQUENTIAL EXPLANATORY STUDY DESIGN PHASES

Phase	Procedure	Product
Recruitment	<ul style="list-style-type: none"> Convenience sampling through community-based veteran associations 	<ul style="list-style-type: none"> Participant sample
Phase 1: Quantitative Data Collection	<ul style="list-style-type: none"> Cross sectional survey (military service demographics, CD-RISC, MAPA, SAS) 	<ul style="list-style-type: none"> Numeric data
Quantitative Data Analysis	<ul style="list-style-type: none"> Descriptive and inferential statistics Regression analysis Measures of central tendency SAS 	<ul style="list-style-type: none"> Meaningful measures Grouping of participants based on low, average, high scores on SAS
Connecting Quantitative & Qualitative Phase	<ul style="list-style-type: none"> Purposeful selection of participants for follow-up interview based on SAS 	<ul style="list-style-type: none"> Life history calendar interview protocol
Phase 2: Qualitative Data Collection	<ul style="list-style-type: none"> Life history calendar interview Reflexive journaling 	<ul style="list-style-type: none"> Textual data from interview transcripts
Qualitative Data Analysis	<ul style="list-style-type: none"> Coding and thematic analysis Member checking 	<ul style="list-style-type: none"> Codes and themes Codebook Cross thematic matrix
Integration of Quantitative & Qualitative Data	<ul style="list-style-type: none"> Sequential expansion Convergence and divergence 	<ul style="list-style-type: none"> Interpretation of mixed-methods results Discussion and implications Future research directions

APPENDIX B: SEMI-STRUCTURED LIFE HISTORY CALENDAR INTERVIEW GUIDE

INTRODUCTION

Today we are going to use the calendar as a reference to talk about your life and the impact of military service of your life experiences.

YEARS BEFORE MILITARY SERVICE

Childhood

- When and where were you born?
- Where were you parents from? What did they do? Did you have any siblings?
- Tell me about your childhood? What did you like to do when you were a child?
- Did anyone in your family serve in the military?
- Looking back over this early part of your life do any difficult events or periods stand out?
Any positive events or periods that stand out?

Adolescence:

- Where did you go to school? What year did you graduate high school?
- What did you like to do as a teenager? Did you have any jobs as a teenager?
- What kind of hobbies did you have? What were you interested in?
- Looking back over this early part of your life do any difficult events or periods stand out?
Any positive events or periods that stand out?

TIME IN MILITARY SERVICE

Early Days

- Did you enlist in the military or were you drafted? How old were you? Did any of your friends join the service?
- If enlisted what prompted your decision to join and why did you choose that specific branch of the military?
- Tell me about saying goodbye to your family and friends.
- Tell me about your experiences during basic training.
- Did you receive any specialized training?
- Do you remember some of the other recruits from that time?
- How did you adapt to military life, including the physical regime, barracks, food and social life?
- Looking back over this part of your life do any difficult events or periods stand out? Any positive events or periods that stand out?

Military Service

- What did you do while you were in the military?
- When and where were you stationed?
- Did you ever serve in a combat or war zone? Can you tell me about those experiences?
- Tell me about some of the responsibilities you had during your time in service?
- What was the highest rank you received? Tell me about your promotions.
- Tell me about some of the people you served with. What do you remember about them?
Did you keep in touch?

- What did you enjoy about being in the military? What did you not enjoy?
- Tell me about how your military service came to an end.
- Looking back over this part of your life do any difficult events or periods stand out? Any positive events or periods that stand out?

ADULTHOOD AFTER MILITARY SERVICE

- What was it like readjusting to civilian life after the military?
- When did you get married? How old were you? Can you tell me about your partner and how you met?
- Tell me about what you did for work/career after the military? Did you go to college?
- Do you have any children? Grandchildren? Can you tell me about them?
- Did your time in military service have an impact on your work/career after the military?
- Looking back over this part of your life do any difficult events or periods stand out? Any positive events or periods that stand out?

OLDER ADULTHOOD

- Are you retired? If so, can you tell me about your experience transitioning to retirement?
- What does a typical day look like for you now?
- Do you have any hobbies or special interests?
- What do you do for fun? What makes you happy?
- Who do you spend time with? What relationships are important to you?
- What things are most important to you now?
- How do you think being in the military has impacted your life?

- What are some lessons you learned from your time in the military that have stuck with you?
- Do you keep up with anyone you knew from the military or have any military affiliations?
- Looking back over your older age are there any difficult events or periods? Any positive events or periods that stand out?

APPENDIX C: LIFE HISTORY CALENDAR

	Before Military Service	During Military Service	Mid-Life/After Military Service	Older Adulthood
Family Context				
Major Life Events				
Work				
Important Places You Lived				
Meaningful Activities				
Relationships with Others				
Difficult Events/Challenges				
Strengths/Coping Strategies				

REFERENCES

- Adler, A. B. (2013). Resilience in a military occupational health context: Directions for future research. In R. R. Sinclair & T. W. Britt (Eds.), *Building psychological resilience in military personnel: Theory and practice* (p. 223–235).
- American Psychological Association. <https://doi.org/10.1037/14190-010>
- Adler, A. B., & Sowden, W. J. (2018). Resilience in the military: The double-edged sword of military culture. In L.W. Roberts & C.H. Warner (Eds.), *Military and veteran mental health: A comprehensive guide* (p. 43–54). Springer.
- Aldwin, C. M., Park, C. L., Choun, S., & Lee, H. (2018). The impact of military service on stress, health, and well-being in later life. In A. Spiro III, R.A., Settersen, & C.M. Aldwin (eds.), *Long-term outcomes of military service: The health and well-being of aging veterans* (pp 146–166). Washington, DC: American Psychological Association
- Aldwin, C. M., Levenson, M. R., & Spiro III, A. (1994). Vulnerability and resilience to combat exposure: Can stress have lifelong effects? *Psychology and Aging*, *9*(1), 34–44.
- Alwin, D. F. (2012). Integrating varieties of life course concepts. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *67*(2), 206–220
- American Psychological Association. (2018). *The road to resilience*. Retrieved from: <http://www.apa.org/helpcenter/road-resilience.aspx>
- Asaba, E. & Jackson, J. (2011) Social ideologies embedded in everyday life: A narrative analysis about disability, identities, and occupation. *Journal of Occupational Science*, *18*, 139–152, Doi: 10.1080/14427591.2011.579234
- Atul, H. R., & Castro, C. A. (2018). Military cultural competence. *Clinical Social Work Journal*, *46*, 74–82.
- Averill, J. B. (2002). Matrix analysis as a complementary analytic strategy in qualitative inquiry. *Qualitative Health Research*, *12*(6), 855–866. <https://doi.org/10.1177/104973230201200611>
- Bailliard, A. (2016). Justice, difference, and the capability to function. *Journal of Occupational Science*, *23*(1), 3–16. doi:10.1080/14427591.2014.957886
- Bailliard, A. & Aldrich, R. M. (2016). Occupational justice in everyday occupational therapy practice. In N. Pollard & D. Sakellariou (Eds.), *Occupational therapies without borders: Integrating justice with practice* (2nd ed., pp. 83–94) Elsevier.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes and M. M. Baltes (Eds.),

- Successful aging: Perspectives from the behavioral sciences* (pp. 1–34). New York: Cambridge University Press.
- Baltes, M. M., & Carstensen, L. L. (1996). The process of successful ageing. *Ageing & Society*, *16*(4), 397–422.
- Bazeley, P. (2018). *Integrating analyses in mixed methods research*. Sage Publishing.
- Bhagwati, A. (2019). *Unbecoming: A memoir of disobedience*. Atria Press.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, *26*, 1802–1811.
- Black, H. K. (2015). Three generations, three wars: African American veterans. *The Gerontologist*, *56*(1), 33–41.
- Bonnano, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, *59*(1), 20–28.
- Bornat, J. (2001). Reminiscence and oral history: Parallel universes or shared endeavor? *Ageing and Society*, *21*, 219–241.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77–101.
- Britton, D. M., & Williams, C. L. (1995). “Don’t ask, don’t tell, don’t pursue”: Military policy and the construction of heterosexual masculinity. *Journal of Homosexuality*, *1*(30), 1–21.
- Brown-Yung, K., Walker, R. B., & Luszcz, M. A. (2017). An examination of resilience and coping in the oldest old using life narrative method. *The Gerontologist*, *57*(2), 282–291.
- Burnell, K., Coleman, P., & Hunt, N. (2010). Coping with traumatic memories: Second World War veterans’ experiences of social support in relation to the narrative coherence of war memories. *Ageing & Society*, *30*, 57–78.
- Campbell-Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the Connor-Davidson Resilience Scale (CD-RISC): Validation of a 10-item measure of resilience. *Journal of Traumatic Stress*, *20*, 1019–1028.
- Carlson, J. A. (2010). Avoiding traps in member checking. *The Qualitative Report*, *15*, 1102–1113
- Carroll, A. (2018). *Current evidence and topical trends in occupational therapy focused on military members and veterans: A scoping review of the occupational therapy literature*. Manuscript in preparation.
- Center for Policy on Ageing (2014). *Resilience and Older Age*. London, UK.

- Christiansen, C. (1999). Defining lives: Occupation as identity. An essay on competence, coherence, and the creation of meaning. *American Journal of Occupational Therapy*, 53, 547–558.
- Christiansen, C. (2007) Adolf Meyer revisited: Connections between lifestyles, resilience and illness. *Journal of Occupational Science*, 14(2), 63–76, DOI:10.1080/14427591.2007.9686586
- Clark, F. A., Parham, D., Carlson, M. E., Frank, G., Jackson, J., Pierce, D., . & Zemke, R. (1991). Occupational science: Academic innovation in the service of occupational therapy's future. *American Journal of Occupational Therapy*, 45(4), 300–310. doi:10.5014/ajot.45.4.300
- Clark, F. (1993). Occupation embedded in a real life: Interweaving occupational science and occupational therapy. 1993 Eleanor Clark Slagle Lecture. *American Journal of Occupational Therapy*, 47(12), 1067–1078.
- Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology*, 112(4), 558–577.
- Connor, K. M. & Davidson, J. R. T. (2003). The development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18, 76–82.
- Cosco, T. D., Kaushal, A., Richards, M., Kuh, D., & Stafford, M. (2016). Resilience measurement in later life: A systematic review and psychometric analysis. *Health and Quality of Life Outcomes*, 14–16.
- Cosco, T. D., Prina, A. M., Perales, J., Stephan, B., & Brayne, C. (2014). Operational definitions of successful aging: A systematic review. *International Psychogeriatrics*, 26, 373–381.
- Cosco, T., Stephan, B., Brayne, C., & Muniz, G. (2017). Education and Successful Aging Trajectories: A Longitudinal Population-Based Latent Variable Modelling Analysis. *Canadian Journal on Aging*, 36(4), 427–434. doi:10.1017/S0714980817000344
- Creswell, J., & Tashakkori, A. (2007). *Journal of Mixed Methods Research*, 1(4), 303–308.
- Creswell, J., & Plano Clark, V. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.
- Crosnoe, R., & Elder Jr, G. H. (2002). Successful adaptation in the later years: A life course approach to aging. *Social Psychology Quarterly*, 65, 309–328.
- Cutchin, M. P. (2007). From society to self (and back) through place: Habit in transactional context. *Occupational Therapy Journal of Research: Occupation, Participation, and Health*, 27, 50S–59S.

- Cutchin, M., Aldrich, R., Bailliard, A., & Coppola, S. (2008). Action theories for occupational science: The contributions of Dewey and Bourdieu. *Journal of Occupational Science*, 15, 157–165.
- Cutchin, M. P., & Dickie, V. A. (2012). Transactionalism: Occupational science and the pragmatic attitude. In Gail E. Whiteford & Clare Hocking (Eds.), *Occupational science: Society, inclusion, participation* (pp. 23–37). Springer: Netherlands.
- Cutchin, M. P., & Dickie, V. A. (2013). Transactional perspectives on occupation: An introduction and rationale. In M. P. Cutchin, & V. A. Dickie (Eds.), *Transactional perspectives on occupation*. (pp. 1–10). New York, NY: Springer.
- Davison, E. H., Pless Kaiser, A., Spiro III, A., Moye, J., King, L. A., & King, D. W. (2016). From late-onset stress symptomatology to later-adulthood trauma reengagement in aging combat veterans: Taking a broader view. *The Gerontologist*, 56, 14–21.
- De, R., Pandley, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. *International Journal of Information Management*, 55, 10271. <https://dx.doi.org/10.1016%2Fj.ijinfomgt.2020.102171>
- Depp, C. A., & Jeste, D. V. (2006). Definitions and predictors of successful aging: A comprehensive review of larger quantitative studies. *American Journal of Geriatric Psychiatry*, 15, 6–20.
- Dewey, J. (1922). *Human nature and conduct*. New York, NY: Henry Holt and Company.
- Dickie, V., Cutchin, M. P., & Humphry, R. (2006). Occupation as transactional experience: A critique of individualism in occupational science. *Journal of Occupational Science*, 13(1), 83–93. doi:10.1080/14427591.2006.9686573
- Donovan, N. J., & Blazer, D. (2020). Social isolation and loneliness in older adults: Review and commentary of national academies report. *American Journal of Geriatric Psychiatry*, 28(12), 1233–1244. <https://dx.doi.org/10.1016%2Fj.jagp.2020.08.005>
- Doyle, S. (2007). Member checking with older women: A framework for negotiating meaning. *Health Care for Women International*, 28, 888–908.
- Durocher, E., Gibson, B. E. & Rappolt, S. (2014). Occupational justice: A conceptual review. *Journal of Occupational Science*, 21(4), 418–430.
- Eakman, A. M., Carlson, M. E., & Clark, F.A. (2011). The meaningful activity participation assessment: A measure of engagement in personally valued activities. *International Journal of Human Development*, 70, 299–317.
- Elder, G. H., (1986). Military times and turning points in men’s lives. *Developmental Psychology*, 22, 233–245.
- Elder, G. H. (1998). The life course as developmental theory. *Child Development*, 69(1), 1–12.

- Elder, G. H., Jr. & Johnson, M. (2002). The life course and human development: Challenges, lessons, and new directions. In Setterson, R.A. (Eds.), *Invitation to the life course: Toward new understandings of later life* (pp. 49–81). Amityville, NY: Baywood.
- Elder, G. H., Jr, Shanahan, M. J., & Clipp, E. C. (1994). When war comes to men's lives: Life course patterns in family, work, and health. *Psychology and Aging, 9*(1), 5–16.
- Elder, G. H., Jr., Shanahan, M. J., & Jennings, J. A. (2015). Human development in time and place. In T. Leventhal & M. Bornstein (Eds.), *Handbook of child psychology and developmental science: Ecological settings and processes in developmental systems* (Vol. 4, 7th ed., pp. 6–54). New York, NY: Wiley & Sons.
- Farias, L. & Asaba, E. (2013) “The family knot”: Negotiating identities and cultural values through the everyday occupations of an immigrant family in Sweden. *Journal of Occupational Science, 20*, 36–47. Doi:10.1080/14427591.2013.764580
- Falk-Kessler, J., Kalina, J. T., & Miller, P. (2012). Influence of occupational therapy on resilience in individuals with multiple sclerosis. *International Journal of MS Care, 14*, 160–168.
- Fanning, J. R., & Pietrzak, R. H. (2013). Suicidality among older male veterans in the United States: results from the national health and resilience in veterans' study. *Journal of Psychiatry, 47*, 1766–1775. doi:10.1016/j.jpsychires.2013.07.015
- Feldman, S., & Howie, L. (2009). Looking back, looking forward: Reflections on using a life history review tool with older people. *Journal of Applied Gerontology, 28*, 621–637.
- Fesmire, S. (2003). *John Dewey and moral imagination: Pragmatism in ethics*. Bloomington, IN: Indiana University Press.
- Fischl, C., Asaba, E. & Nilsson, I. (2017) Exploring potential in participation mediated by digital technology among older adults. *Journal of Occupational Science, 24*(3), 314–326, DOI:10.1080/14427591.2017.1340905
- Gade, P. A. (1991). Military service and the life course perspective: A turning point for military personnel research. *Military Psychology, 3*(4), 187–199.
- Goldich, D., & Swift, A. (2014, May 23). *American say Army most important branch to U.S. defense*. Gallup. <https://news.gallup.com/poll/170657/americans-say-army-important-branch-defense.aspx>
- Greene, J. C. (2006). Toward a methodology of mixed methods social inquiry. *Research in the Schools, 13*(1),93–99.
- Hammell, K. (2008). Reflections on... Well-being and occupational rights. *Canadian Journal of Occupational Therapy, 5*(1), 61–64. <https://doi.org/10.2182/cjot.07.007>

- Hammell, K. (2009). Sacred Texts: A skeptical exploration of the assumptions underpinning theories of occupation. *Canadian Journal of Occupational Therapy*, 76(1),6–13.
- Hammell, K. (2015). Quality of life, participation, and occupational rights: A capabilities perspective. *Australian Occupational Therapy Journal*, 62, 78–85.
- Hammell, K. W. & Beagan, B. (2017). Occupational injustice: A critique. *Canadian Journal of Occupational Therapy*, 84(1) 58–68.
- Harris, P. B. (2008). Another wrinkle in the debate about successful aging: The undervalued concept of resilience and the lived experience of dementia. *International Journal of Aging and Human Development*, 67(1), 43–61.
- Heatwole Shank, K. (2013). Mixed methods and pragmatism for research on occupation. In M. P. Cutchin & V. A. Dickie (Eds.) *Transactional Perspectives on Occupation* (pp. 183–213). New York, NY: Springer.
- Hoffer, S. M., Sliwinski, M. J., & Flaherty, B. P. (2002). Understanding ageing: Further commentary on the limitations of cross-sectional designs for ageing research. *Gerontology*, 48(22), 22–29. <https://doi.org/10.1159/000048920>
- Hocking, C. (2009). The challenge of occupation: Describing the things people do. *Journal of Occupational Science*, 16(3), 140–150. doi:10.1080/14427591.2009.9686655
- Hocking, C. (2000). Occupational science: A stock take of accumulated insights. *Journal of Occupational Science*, 7, 61–67.
- Hocking, C. (2012). Occupations through the looking glass: Reflecting on occupation scientists' ontological assumptions. In Whiteford & Hocking (Eds.), *Occupational science: Society, inclusion, participation* (pp. 54–64). West Sussex, UK: Wiley-Blackwell.
- Hocking, C., & Whiteford, G. (2012). Introduction to critical perspectives in occupational science. In G. E. Whiteford & C. Hocking (Eds.), *Occupational science: Society, inclusion, participation* (pp. 3–7). West Sussex, UK: Wiley-Blackwell.
- Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press
- Holland, D. & Lachicotte, W. (2007). Vygotsky, Mead and the new sociocultural studies of identity. In H. Daniels, M. Cole, & J. Wertsch (Eds.), *The Cambridge Companion to Vygotsky* (pp. 101–135). Cambridge, U.K.: Cambridge University Press.
- Huot, S. & Rudman, D. L. (2010). The performances and places of identity: Conceptualizing intersections of occupation, identity and place in the process of migration, *Journal of Occupational Science*, 17, 68–77. Doi:10.1080/14427591.2010.9686677
- Huot, S., & Laliberte Rudman, D. (2015). Extending beyond qualitative interviewing to illuminate the tacit nature of everyday occupation: Occupational mapping and

- participatory occupation methods. *OTJR: Occupation, Participation and Health*, 35, 142–150.
- Iskra, D. M. (2010). *Women in the United States Armed Forces: A Guide to the Issues*. Santa Barbara: Praeger Publishing.
- Ivankova, N., Creswell, J., & Stick, S. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, 18, 3–20.
- Ivanakova, N., & Stick, S. (2007). Students' persistence in a distributed doctoral program in educational leadership in higher education. *Research in Higher Education*, 48, 93–135.
- Jackson, J., Carlson, M., Mandel, D., Zemke, R., & Clark, F. (1998). Occupation in lifestyle redesign: The well-elderly study occupational therapy program. *American Journal of Occupational Therapy*, 52, 326–336.
- Jansen, D. A., & von Sandovszky, V. (2004). Restorative activities of community-dwelling elders. *Western Journal of Nursing Research*, 26, 381–399.
- Johnson, S. (2014, November 9). *What separates the Marines from the other branches?* USO. <https://www.uso.org/stories/2910-what-separates-the-marines-from-the-other-branches>
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1, 112–133.
DOI:10.1177/1558689806298224
- Kaiser, A. P., K., D. H., Spiro III, A., Davison, E. H., & Stellman, M. (2017). Women at war: The crucible of Vietnam. *SSM Population Health*, 3, 236–244.
<http://dx.doi.org/10.1016/j.ssmph.2017.01.003>
- Kantartzis, S. & Molineux, M. (2010). The influence of Western society's construction of a healthy daily life on the conceptualization of occupation. *Journal of Occupational Science*, 18(1), 62–80.
- Keilhofner, G. (2002). Doing and becoming: In G. Kielhofner (Ed.) *A Model of Human Occupation: Theory and Application*. (pp. 124–144). Baltimore: MA: Lippincott, Williams, and Wilkins.
- Kestenbaum, V. (1977). *The phenomenological sense of John Dewey: Habit and meaning*. Atlantic Highlands, NJ: Humanities Press.
- Kirchen, T., Hersch, G., & Pickens, N. D. (2014). Occupational engagement of veterans in LTC: Testing the effectiveness of a military cultural intervention. *Physical & Occupational Therapy in Geriatrics*, 32(4), 321–335.
- Kirchen, T., & Hersch, G. (2015). Understanding the person and environment factors that facilitate veteran adaptation to long-term care. *Physical & Occupational Therapy in Geriatrics*, 33(3), 204–219.

- Kleykamp, M. A. (2006). College, jobs, or the military? Enlistment during a time of war. *Social Science Quarterly*, 87(2), 272–290.
- Krueger, G. P. (2000). Military culture. *Encyclopedia of Psychology*, 5, 251–259.
- Kuwert, P., Knaevelsrud, C., Pietrzak, R. H. (2014). Loneliness among older veterans in the United States: results from the national health and resilience in veterans' study. *American Journal of Geriatric Psychiatry*, 22, 564–9. doi:10.1016/j.jagp.2013.02.013
- LaCroix, A. Z., Rillamas-Sun, E., Woods, N., Weitlauf, J., Zaslavsky, O., Shih, R., LaMonte, M. J., Bird, C., Yano, E. M., LeBoff, M., Washington, M., Reiber, G. (2016). Aging Well Among Women Veterans Compared with Non-Veterans in the Women's Health Initiative, *The Gerontologist*, 56, S14–S26, <https://doi-org.libproxy.lib.unc.edu/10.1093/geront/gnv124>
- Laliberte, Rudman, D. (2002). Linking occupation and identity: Lessons learned through qualitative exploration. *Journal of Occupational Science*, 9(1), 12–19.
- Laliberte Rudman, D. (2012). Governing through occupation: Shaping expectations and possibilities. In G. E. Whiteford & C. Hocking (Eds.), *Occupational science: Society, inclusion, participation* (pp.100–116). West Sussex, UK: Wiley-Blackwell.
- Laliberte Rudman, D. (2013). Embracing and enacting 'the occupational imagination': Occupational science as transformative. *Journal of Occupational Science*, 21(4), 373–388.
- Lassiter, L. E. (2005). *The Chicago guide to collaborative ethnography*. Chicago, IL: The University of Chicago Press
- Law, M., Steinwender, S., & LeClair, L. (1998). Occupation, health and well-being. *Canadian Journal of Occupational Therapy*, 65, 81–91.
- Lieber, E., & Weisner, T. S. (2010). Meeting the practical challenges of mixed methods research. In A. Tashakkori & Teddlie, C. (Eds). *Sage Handbook of Mixed Methods in Social and Behavioral Research* (pp. 559–580). Thousand Oaks, CA: Sage Publications
- Lood, O., Björk, S., Sköldunger, A., Backman, A., Sjögren, K., & Edvardsson, D. (2017) The relative impact of symptoms, resident characteristics and features of nursing homes on residents' participation in social occupations: Cross-sectional findings from U-Age Swenis, *Journal of Occupational Science*, 24(3), 327–337, DOI:10.1080/14427591.2017.1306721
- Lutz, A. C. (2013). Race-ethnicity and immigration status in the U.S. military. In J. M. Wilmoth & A. S. London (eds.), *Life course perspectives on military service* (pp. 68–96). New York, NY: Routledge.
- MacLean, A., & Elder, G. H., Jr. (2007). Military service in the life course. *Annual Review of Sociology*, 33, 175–196.

- MacLeod, S., Musich, S., Hawkins, K., Alsgaard, K., & Wicker, E. R. (2016). The impact of resilience among older adults. *Geriatric Nursing, 37*(4), 266–272.
- Mankowski, M., Tower, L. E., Brandt, C. A., Mattocks, K. (2015). Why women join the military: Enlistment decisions and post deployment experiences of service members and veterans. *Social Work, 60*(4), 315–323, <https://doi.org/10.1093/sw/swv035>
- Marini, C. M., Fiori, K. L., Wilmoth, J. M., Pless Kaiser, A., & Martire, L.M. (2020). Psychological adjustment of aging Vietnam veterans: The role of social network ties in reengaging with wartime memories. *Gerontology, 66*, 138–148. DOI:10.1159/000502340
- Martyn, K. K., & Belli, R. F. (2002). Retrospective data collection using event history calendar. *Nursing Research, 51*, 270–274.
- Martinson, M., & Berridge, C. (2015). Successful aging and its discontents: A systematic review of the social gerontology literature. *The Gerontologist, 55*(1), 58–69.
- MacLean, A. (2010). The things they carry: Combat, disability, and unemployment among U.S. men. *American Sociological Review, 75*(4), 563–585. doi:10.2307/20799477
- MacLean, A., & Kleycamp, M. (2021). Generations of veterans: Socioeconomic attainment from World War II to the contemporary era. *Social Science History, 45*, 83–110. <https://doi.org/10.1017/ssh.2020.42>
- Masten, A. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*(3) 227–238.
- Matuska, K. (2013). The art and science of resilience. *OTJR: Occupation, Participation, and Health, 34*(1), 1–3. doi:10.3928/15394492-20131211-01
- McGarry, R., Walkate, S., & Mythen, G. (2015). A sociological analysis of military resilience: Opening up the debate. *Armed Forces and Society, 41*(2), 352–378. DOI:10.1177/0095327X13513452
- Mertens, D. M. (2007). Transformative paradigm: Mixed methods and social justice. *Journal of Mixed Methods Research, 1*(3), 212–225.
- Mertens, D. M. (2009). *Transformative research and evaluation*. New York, NY: Guilford Press.
- Mertens, D. M. (2012). Transformative mixed methods: Addressing inequities. *American Behavioral Scientist, 56*, 802–813.
- Menec, V. H. (2003). The relation between everyday activities and successful aging: A 6-year longitudinal study. *The Journals of Gerontology, 58*(2), S74–82.
- Meyer, E. G., Writer, B., & Brim, W. (2016). The importance of military cultural competence. *Current Psychiatry Reports, 18*(3), 26.

- Monin J. K., Levy B. R., & Pietrzak R. H. (2014). From serving in the military to serving loved ones: unique experiences of older veteran caregivers. *American Journal of Geriatric Psychiatry, 22*, 570–9. doi: 10.1016/j.jagp.2012.11.023
- Mota, N. P., Tsai, J., Kirwin, P. D., Harpaz-Rotem, I., Krystal, J. H., & Southwick, S. M. (2016). Late-life exacerbation of PTSD symptoms in US veterans: Results from the national health and resilience in veterans study. *Journal of Clinical Psychiatry, 77*, 348–354. doi:10.4088/JCP.15m10101
- National Center for Veterans Analysis and Statistics. (2016). Veteran Population Projections Model . Retrieved from https://va.gov/vetdata/docs/Demographics/New_Vetpop_Model/Vetpop_Infographic_Final31.pdf
- Nelson, I. (2010). From quantitative to qualitative: Adapting the life history calendar method. *Field Methods, 22*, 413–428.
- Nilsson, I., Bernspang, B., Fisher, A. G., Gustafson, Y., & Lofgren, B. (2007). Occupational engagement and life satisfaction in the oldest-old: The Umea 85+ study. *Occupational Therapy Journal of Research, 27*, 131–139.
- Olenick, M., Flowers, M., & Diaz, V.J. (2015). US veterans and their unique issues: Enhancing health care professional awareness. *Advanced Medical Education Practice, 6*, 635–639.
- Özşungur F. (2020). Women's successful aging. *Health Care for Women International, 41*(9), 997–1017. <https://doi.org/10.1080/07399332.2019.1667994>
- Patton, M.Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Pietrzak, R. H., & Cook, J. M. (2013). Psychological resilience in older US veterans: results from the national health and resilience in veterans' study. *Depression and Anxiety, 30*(5), 432–443.
- Pietrzak, R. H., Tsai, J., Kirwin, P. D., & Southwick, S. M. (2014). Successful aging among older veterans in the United States. *The American Journal of Geriatric Psychiatry, 22*(6), 551–563.
- Phelan, S. & Kinsella, K.A. (2009) Occupational identity: Engaging socio-cultural perspectives. *Journal of Occupational Science, 16*, 85–91. Doi:10.1080/14427591.2009.9686647
- Pollman, A. (2018, June). *Framing Marine Corps culture*. U.S. Naval Institute. <https://www.usni.org/magazines/proceedings/2018/june/framing-marine-corps-culture>
- Porcellato, L., Carmichael, F., Hulme, C. (2014). Using occupational history calendars to capture lengthy and complex working lives: A mixed method approach with older people. *International Journal of Social Research Methodology, 19*, 269–286.

- Pruncho, R. (2015). Successful aging: Contentious past, productive future. *The Gerontologist*, 55(1), 1–4.
- Pruchno, R. (2016). Veteran’s aging. *The Gerontologist*, 56(1), 1–4.
- Pruchno, R., Wilson-Genderson, Rose, M., Cartwright, F. (2010). Successful aging: Early influences and contemporary characteristics. *The Gerontologist*, 50(6), 821–833.
- Ray, M. (2007). Redressing the balance? The participation of older people in research. In M. Bernard & T. Scharf (Eds.), *Critical perspectives on ageing societies* (pp. 1–13). Bristol, UK: Policy Press.
- Recker, G. T. (2009). A brief manual of the Successful Aging Scale (SAS). Retrieved from https://www.researchgate.net/publication/266559500_TEST_MANUAL_The_Successful_Aging_Scale_SAS
- Reed, K., Hocking, C. & Smythe, L. (2010) The interconnected meanings of occupation: The call, being with, possibilities, *Journal of Occupational Science*, 17(3), 140–149.
- Reger, M. A., Etherage, J. R., Reger, G. M., Gahm, G. A. (2008). Civilian psychologists in an army culture: The ethical challenge of cultural competence. *Military Psychology*, 20(1), 1–21.
- Rowe J. W., & Kahn R. L. (1997). Human aging: Usual versus successful. *Science*, 237, 143–149.
- Rowe, J. W., & Kahn, R. L. (2015). Successful aging 2.0: conceptual expansions for the 21st century. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 70(4), 593–596.
- Rowles, G. D., & Ravdal, H. (2002). Aging, place, and meaning in the face of changing circumstances. In R. S. Weiss & S. A. Bass (Eds.), *Challenges of the third age: Meaning and purpose in later life* (pp. 81–114). New York: Oxford University Press.
- Rozanova, J., Noulas, P., Southwick, S. M., & Pietrzak, R. H. (2015). Perceptions of determinants of successful aging among older US veterans: Results from the National Health and Resilience in Veterans Study. *The American Journal of Geriatric Psychiatry*, 23(7), 744–753.
- Rudman, D. & Dennhardt, S. (2008). Shaping knowledge regarding occupation: Examining the cultural underpinnings of the evolving concept of occupational identity. *Australian Journal of Occupational Therapy*, 55, 153–162.
- Ryff, C. D. (1989). Beyond Ponce de Leon and life satisfaction: New directions in quest of successful ageing. *International Journal of Behavioral Development*, 12, 35–55.
- Saldana, J. (2013). *The coding manual for qualitative researchers* (2nd edition). London, England: Sage Publications.

- Sampson, R., & Laub, J. (1996). Socioeconomic achievement in the life course of disadvantaged men: Military service as a turning point, circa 1940-1965. *American Sociological Review*, *61*, 247–367.
- Santoso, T. B., Ito, Y., Ohshima, N., & Hidaka, P. B. (2015). Resilience in daily occupations of Indonesian mothers of children with autism spectrum disorder. *American Journal of Occupational Therapy*, *69*, 6905185020. <http://dx.doi.org/10.5014/ajot.2015.017566>
- Schulz, R., & Heckhausen, J. (1996). A life span model of successful aging. *American Psychologist*, *51*, 702–714.
- Segal, D. R., & Segal, M., D. (2004). America's military population. *Population Bulletin* *59*(4), 57–61.
- Settersten, R. A., Jr. (2006). When nations call: How wartime military service matters for the life course and aging. *Research on Aging*, *28*(1), 12–36.
- Settersten, R. A., Jr., Recksiedler, C., Godlewski, B., & Elder, G. H., Jr. (2018). Two faces of wartime experience: Collective memories and veterans' appraisals in later life. In A. Spiro III, R. A. Settersten, Jr., & C. M. Aldwin (Eds.), *Long-term outcomes of military service: Perspectives on health and wellbeing*. Washington, D.C.: American Psychological Association Press.
- Sinclair, R. R., & Britt, T. W. (2013). *Building psychological resilience in military personnel: Theory and practice*. American Psychological Association. <https://doi.org/10.1037/14190-010>
- Smallfield, S., & Molitor, W.L. (2018). Occupational therapy interventions supporting social participation and leisure engagement for community-dwelling older adults: A systematic review. *The American Journal of Occupational Therapy*, *72*(4):7204190020. <https://doi.org/10.5014/ajot.2018.030627>
- Stadnyk, R., Townsend, E., & Wilcock, A. (2010). Occupational justice. In C. Christiansen & E. A. Townsend (Eds.) *Introduction to occupation: The art and science of living* (2nd ed.) (pp. 329–358). Upper Saddle River, NJ: Pearson Education.
- Stawski, R. S., Fenn, M. L., Wu, C., & Fisher, G. G. (2018). Military service and changes in memory performance in later life. In A. Spiro III, R. A., Settersen, & C. M. Aldwin (eds.), *Long-term outcomes of military service: The health and well-being of aging veterans* (pp. 207–224). Washington, DC: American Psychological Association.
- Stowe, J. D., & Cooney, T. M. (2015). Examining Rowe and Kahn's concept of successful aging: Importance of taking a life course perspective. *The Gerontologist*, *55*(1), 43–50.
- Spiro III, A., Settersten, R. A., & Aldwin, C. M. (2016). Long-term outcomes of military service in aging and the life course: A positive re-envisioning. *The Gerontologist*, *56*(1), 5–13.

- Suter, E. A., Lamb, E. N., Marko, M., & Tye-Williams, S. (2006). Female veterans' identity construction, maintenance, and reproduction. *Women and Language, 29*(1), 10–15.
- Tanielian, T., & Jaycox, L. (2008). *Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery*. Santa Monica, CA: RAND Corporation. Retrieved from <http://www.rand.org/pubs/monographs/MG720.html>
- Taylor, J. & Kay, S. (2015). The construction of identities in narratives about serious leisure occupations. *Journal of Occupational Science, 22*, 260–276.
Doi:10.1080/14427591.2013.803298
- Tippett, R. (2015). NC in focus: Veteran population 2015. Retrieved from <https://demography.cpc.unc.edu/2015/11/11/nc-in-focus-veteran-population-2015/>
- Thomas, K. H., & Taylor, S. P. (2015). Bulletproofing the psyche: Mindfulness interventions in the training environment to improve resilience in the military and veteran communities. *Advances in Social Work, 16*, 312–322. DOI: 10.18060/1853
- Tusaie, K., & Dyer, J. (2004). Resilience: A historical review of the construct. *Holistic Nursing Practice, 18*(1), 3–8.
- Townsend, E., & Wilcock, A. A. (2004). Occupational justice and client-centered practice: A dialogue in progress. *Canadian Journal of Occupational Therapy, 71*, 75–87.
- United States Census Bureau. (2018a). Older people projected to outnumber children for the first time in U.S. history. Retrieved from: <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html>
- United States Census Bureau. (2018b). Veterans Day 2018: November 11. Retrieved from: <https://www.census.gov/newsroom/facts-for-features/2018/veterans-day.html>
- United States Marine Corps (2014). Leading Marines. Retrieved from: <https://www.marines.mil/Portals/1/Publications/MCWP%206-11%20Leading%20Marine.pdf>
- Unruh, A.M. (2004). Reflections on “So what do you do? Occupation and the construction of identity. *Canadian Journal of Occupational Therapy, 71*, 290–296.
- U.S. Government Accountability Office. (2015). Report to congressional committees. Military personnel: DOD is expanding combat service opportunities for women, but should monitor long-term integration progress. Retrieved from: <https://www.gao.gov/products/gao-15-589>
- Vergun, D. (2020). First peacetime draft enacted just before World War II. Retrieved from: <https://www.defense.gov/Explore/Features/story/Article/2140942/first-peacetime-draft-enacted-just-before-world-war-ii/>

- Victor, C. R., & Yang, K. (2012) The prevalence of loneliness among adults: A case study of the United Kingdom. *Journal of Psychology, 146*, 85–104.
- Villa, V. M., Harada, N. D., Washington, D., & Damon-Rodriguez, J. (2003). The health and functional status of US veterans aged 65+: Implications for VA health programs serving an elderly, diverse veteran population. *American Journal of Medical Quality, 18*, 108–116.
- Wagnild, G. (2003). Resilience and successful aging. Comparison among low and high income older adults. *Journal of Gerontological Nursing, 29*(12), 42–49.
<https://doi.org/10.3928/0098-9134-20031201-09>
- Waldrop, M. (2016). *Understanding women leaders in a male-dominated profession: A study of the United States Marine Corps' Women Generals*. (Publication No. 10128125, University of San Diego), ProQuest Dissertations Publishing.
- Wardale, D., Cameron, R., Li, J. (2015). Considerations for multidisciplinary, culturally sensitive, mixed methods research. *Electronic Journal of Business Research Methods, 13*(1), 37–47.
- Weiner, M. R., Monin, J. K., Mota, N., & Pietrzak, R. H. (2016). Age differences in the association of social support and mental health in male US veterans: Results from the national health and resilience in veterans' study. *American Journal of Geriatric Psychiatry, 24*, 327–36. doi:10.1016/j.jagp.2015.11.007
- Wilcock, A. (1993) A theory of the human need for occupation. *Journal of Occupational Science, 1*, 17–24.
- Wilcock, A. (1999). Reflections on doing, being, and becoming. *Canadian Journal of Occupational Therapy, 65*, 248–256.
- Wild, K., Wiles, J. L., & Allen, R. E. S. (2013). Resilience: Thoughts on the value of the concept for critical gerontology. *Ageing & Society, 33*, 137–158.
- Wilmoth, J. M., & London, A. S. (2013). Life course perspectives on military service: An introduction. In J. M. Wilmoth & A. S. London (eds.), *Life course perspectives on military service* (pp. 1–18). New York, NY: Routledge.
- Wilmoth, J. M., London, A. S., Oliver, W. J. (2018). Military service experiences and older men's trajectories of self-rated health. In A. Spiro III, R. A., Settersen, & C. M. Aldwin (eds.), *Long-term outcomes of military service: The health and well-being of aging veterans* (pp. 124–145). Washington, DC: American Psychological Association.
- Wilson, G., Hill, M., & Kiernan, M. D. (2018). Loneliness and social isolation of military veterans: A systematic narrative review. *Occupational Medicine, 68* (9), 600–609,
<https://doi.org/10.1093/occmed/kqy160>

- Wright-St. Clair, V. (2012). Being occupied with what matters in advanced age. *Journal of Occupational Science*, 19(1), 44–53.
- Wright Voss, M. Merryman, B., Crabtree, L., Subasic, K., Birmingham, W., Wadsworth, L., & Hung, M. (2019) Late-career unemployment has mixed effects in retirement. *Journal of Occupational Science*, 26(1), 29–39, DOI:10.1080/14427591.2018.1514645
- Yano, E. M., Bastian, L. A., Bean-Mayberry, B., Eisen, S., Frayne, S., Washington, D. L. (2011). Using research to transform care for women veterans: advancing the research agenda and enhancing research-clinical partnerships. *Women's Health Issues*, 21(4 Suppl), S73–S83. doi:10.1016/j.whi.2011.04.002
- Yerxa, E. J. Clark, F., Frank, G., Jackson, J., Parham, D., Pierce, D. et al. (1989). An introduction to occupational science: A foundation for occupational therapy in the 21st century. *Occupational Therapy in Health Care*, 6, 1–17
- Zeng, Y., & Shen, K. (2010). Resilience significantly contributes to exceptional longevity. *Current Gerontology and Geriatrics Research*, 2010, 1–9.